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Preface

We are excited about the release of this maiden edition of the Hallmark University Journal of Management and Social Sciences (HUJMSS).

HUJMSS is a scholarly, peer-blind-reviewed journal published to provide avenue for disseminating top-notch, cutting edge research outputs of academics and professionals in the management and social sciences.

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We hereby invite papers/contributions from scholars across the globe for publication in the next edition. Please note that contributions should be submitted in MS Word format to hujmss@hallmark.edu.ng.

Thank you,

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INNOVATION, BANK EFFICIENCY AND CUSTOMERS SATISFACTION IN NIGERIA

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Abstract

The study examined the effect of innovation on bank efficiency and customers' satisfaction. The study made use of secondary data from financial reports of five deposit money banks in Nigeria which are recognized as first tier banks. The data was analyzed by employing regression and structural equation model. The study established that service innovation has a significant effect (R²=.916, F=44.898** P=0.007) on bank efficiency. Bank efficiency has an effect (R²=14.9, F=2.482** P=0.037) on customers' satisfaction. Innovation (R²=91.9, F=46.222**, P=0.002) also affects customers' satisfaction. The study recommends that deposit money bank should invest more in innovation and maximize banks resources efficiently in other to achieve maximum customer satisfaction.

Keywords: Innovation, Service, Organization Bank Efficiency and Customers Satisfaction

JEL Classification C19 G21 G29

1. Introduction

Banking activities in recent times in Nigeria have move from core intermediation functions to efficient service delivery and customers' satisfaction through innovation and creation of value. Ilo, Ani and Chioke (2014) argue that most Nigerian banks have over the years narrowed their activities, geared their products and services delivery and automated their operations to enhance their performances and capture the market through innovation. Yunus and Waidi (2011) are of the opinion that in the last decade there have been tremendous achievements in banks networking, service delivery, profitability and customers responses as a result of innovation and that employee were made to cope with the demands banking activities in the face of global banking industry dynamisms and customers also benefited from this improved networking and service delivery which inevitably improved banks competitiveness and profitability.

In order to gain relevance both globally and locally in terms of efficiency, service delivery, competition within and outside geographical boundaries and customer satisfaction, banks are continually developing new product, ideas and services processes in order to meet the demand of the intermediation process and stakeholders’ desires. There have been different opinions on what constitutes innovation in the banking sector since the banking sector is in the service industry. According to Oke (2007) the differences in characteristics of service and manufacturing sector can be streamlined to intangibility, homogeneity, perishability and simultaneity, a view supported by Johne and Storey (1997). The intangibility of bank services makes it difficult to measure and this is because services are performance rather than object based. Intangibility makes it difficult for banks to understand how customers perceive innovation in services and evaluate service efficiency (Zeithaml, 1981). Innovation in banks is heterogeneous making performance and services vary from one bank to another and perception of service delivery differs from one customer to another customer. Perishability in bank services is as a result of the fact that the production and consumption of services are inseparable and innovation in services occur usually when client and customers are in interaction.

According to Tahir, Imran and Muhammed (2018) in recent times innovation has been a strategic tool in reshaping the corporate culture of organizations in the face of competency and service legacy and that Innovation in services is getting more recognition from the top management due to its strategic importance and globalize competition, which has led to better change and adoption of best practices through change in processes.

Most literatures and studies looked into innovation in banking industry in terms of information communication technology and performance (Ilo et al, 2014; Yunus & Waidi, 2011) while others looked at innovation in service firms (Jong, Bruins, Dolfsam & Meijaard, 2003; Randhawa & Moira, 2015). Gitonga (2013) examined the relationship between financial innovation and efficiency of commercial banks in Kenya. There is dart of literature looking into how the influence of the three constructs in a particular study. No specific study has shown how the forms of innovation affects e bank efficiency and customers satisfaction. The study therefore looks into innovation, bank efficiency and customers’ satisfaction in deposit money banks in Nigeria. This is to ascertain the degree of effect innovation has on bank efficiency and customers' satisfaction.
The concept of innovation has been exhaustively looked into in literature by various researchers and authors. Schumpeter (1934) defined innovation as a radical act which is the introduction of new elements or a new combination of old elements. Innovation is an encompassing idea, practice or object which is new to the organization and to the relevant environment (Wietze & Elfring, 2002). Ilo et al (2014) see innovation as an idea, practice, or object that is perceived to be new by a person or adopting entity. Gitonga (2013) posits that innovation in the bank takes four forms and these are process innovation, organization innovation, product innovation and service innovation.

2.0 Literature Review

The study seeks to examine and establish the most significant variable in determining innovation in bank efficiency and customers satisfaction in deposit money banks in Nigeria, the extent to which innovation affects bank efficiency, the effect of bank efficiency on customers’ satisfaction and the extent at which innovation affects customers’ satisfaction

### Research Hypotheses

H₀₁: Innovation does not significantly affect Bank efficiency

H₀₂: Bank efficiency does not significantly affect and customers’ satisfaction.

H₀₃: Innovation does not significantly affect customer satisfaction.

2.1 Process Innovation

The process innovation in banks exists in the way transactions are carried out especially in retail banking. It involves time taken in interbank bank transaction and bank -to -customer interface. Gitonga (2013) reveals that bank process innovation involves real-time gross settlement (RTGS) system which is a fund transfer mechanism where the transfer of money takes place one bank to another on a real time gross basis and this allows for transactions to be processed immediately they are received without batching with other transactions.

2.2 Organization Innovation

According to Oke (2007), organization innovation deals mainly with people and organization climate issues: the salient nature of organization innovation is the need to create an environment where employees are motivated to contribute to innovation. Gitonga (2013) argues that it is the new way work can be organized, and accomplished within a bank to encourage and promote competitive advantage and independence of creativity among employees and management in overcoming risks and costs thus increasing efficiency. Shakhala (2012) is of the opinion that organizational innovation requires a culture of innovation that supports new ideas, processes and generally new ways of doing business. Organization innovation is a culture which involves the creation of an enabling environment for the interaction between management-to-employees and organization and customers which increases organizational efficiency and performance.

2.3 Product Innovation

Product innovation in the banking sector differs from that of the manufacturing sector because the production and consumption are inseparable in banking. Gitua (2011) is of the view that bank accounts tailored for specific age, workforce, social status and educational purpose are product innovation while Gitonga (2013) sees product innovation as different bank accounts tailored towards meeting the need of specific status groups in the society. Product innovation in bank is the creation of value, ideas and different types of bank account products tailored towards meeting the need of a particular group of bank customers.

2.4 Service Innovation

There has been no generally accepted definition of service innovation. Grönroos (1990) defines service as an activity or series of activities of more or less intangible nature that normally, but not necessarily, take place in interactions between the customer and service employees and/or physical resources and/or systems of the service provider, which are provided as solutions for customer problems. Service innovations are a mix of reproduced (although incremental) innovations and small non-reproduced changes to solve single customers’ problems (what we will also call ad hoc innovation). The latter is particularly a result of the customer interaction process (Sunbo & Gallouj, 2019). Service innovation is the multidisciplinary process of designing, realizing and marketing combinations of existing and/or new services and products with the final attempt to create valuable customer experiences (Flikkema, Spaargaren & Kwakman. 2010).

As a result of the complex nature of service innovation, Vos (2010) posits that there are three approaches to defining service innovation. These are assimilation approach (focusing on technological change, innovation in services is seen as fundamentally similar to innovation in manufacturing. That is, as the production and the use of technologically advanced artefacts), the demarcation approach (which views service innovation as substantially different from manufacturing, and new theories, instruments and indicators have to be designed to understand innovation in service contexts) and the synthesis approach
which recognizes innovation in services points and emphasizes attention to the neglected aspects of innovation processes in general, highlighting different types of innovation.

2.5 Nigerian Bank Efficiency
Different policies and reforms have taken place in the Nigerian banking sector which has led to a more vibrant, efficient, customer confidence boosting and a higher performance in operations. The inefficient banks in Nigerian have merged to become stronger banks while others have been acquired by the most efficient ones. Oke & Poloaminia (2012) posit that policies by the central monetary body in Nigeria have continued to bring about an efficient evolving banking system where inefficient and less productive banks are continuous acquired by more efficient ones or taking over by the government. Ajayi (2005) reveals that bank reforms in Nigeria are aimed at addressing issues of operational inefficiencies, risk and credit management, and corporate governance. Adegbaju and Olokoyo (2008) are of the opinion that the Nigerian banking system has undergone significant and remarkable changes in recent times and this has shown in the number of vibrant and efficient institutions available, ownership structure and depth of operations. They further argue that these changes have been brought about by deregulation of the financial sector, technological innovation, globalization of operations conformity to standard as prescribed the monetary body. Usman and Fadipe (2014) posit that Nigerian banks evolve to maximize economies of scale in order to trade off the cost of collecting and processing information designed to reduce uncertainty thereby leading to more efficient banks. The study seeks to establish how efficient the Nigerian banks are in recent in the face of liquidity issues faced by banks since the era of post-consolidation and reduction of banks from the initial 25 to 21 money deposit banks that have operated over 20 years at 2016 (CBN, 2016). The banking industry in recent times has been gripped with the scarcity of funds, with some banks relying on loans from the CBN to fund their operations. In most recent times, borrowing from CBN, through its Standing Lending Facility (SLF) skyrocketed by 230% to N929 billion, indicating that Skye Bank is not the only bank in the liquidity trap (Vanguard, 2019). Nyong (2005) posits that there are six approaches to measuring efficiency and these approaches are production approach, user cost approach, asset approach, intermediation approach, value-added approach and profit approach. The user cost approach would be used in analyzing bank efficiency in this study because the approach determines loans, interest rate and deposits as its variables.

2.6 Customer Satisfaction
Customers satisfaction in literature has been determined by various factors (Liu, 2010; Bennington, Cummame and Conn, 2000; Whiting and Donthu, 2009). According to Rekila (2013), factors determining customers satisfaction can be grouped into customer perception related factors, process-related factors and agent related factors.

i. Customers perception related factors include personalized services, queuing time, agent knowledge of products and service, client ambience and environment of transaction.

ii. Process-related include queuing time, service level and employee turnover

iii. Agent related factors are efficiency demand on firms, employee job fit, performance and monitoring feed and employee mood

In the analysis of customer satisfaction, the SERVQUAL model has been consistently used because it puts into consideration measures such as tangibility, reliability, assurances, empathy and responsiveness (Cronin and Taylor, 1992).

2.7 Innovation, Bank Efficiency and Customers satisfaction: The Nexus
Worimegbe, Adeyi and Worimegbe (2018) explained that the efficiency of deposit money banks goes a long way in determining how much the bank customers are satisfied. They further revealed that the degree of efficiency differs among banks of different sizes and capital base. International banks are more efficient than national and regional banks. Ngumi (2013) posits that innovation in banking activities affects the total bank output such as customers’ deposits and profitability. Innovation in banking operations has an influence on the total performance of a bank. Musara (2011) argued that technological innovations are of great importance and benefits to customers, in terms of improved efficiency and reducing costs for the banking sector customers. Hooy and Chan (2014) established that innovation in bank services is a pivotal dimension in addressing the relative efficiency of deposit money banks. And that banks that provide better technology services have a competitive advantage above their competitors. Innovation is of great essence in the banking sector for efficiency to be achieved and customers to be satisfied.
2. Methodology

3.1 Research Design

This study employed both qualitative and quantitative research design in analyzing the causality between innovation, bank efficiency and customers' satisfaction.

Data were computed from the secondary source. The study population focus of interest are five international deposit money banks in Nigeria selected based on financial times ranking (2018) they are the first tier banks in Nigeria which are among the first 1000 banks in the world. The Customers' Satisfaction Index (CSI) was obtained from the KPMG annual index on bank customers' satisfaction in Nigerian banks.

Data on efficiency and innovation were obtained from the annual reports of deposit money banks in Nigeria from the period of 2011-2015.

The study utilizes regression analysis and structural equation model in determining the degree of effect among variables and ascertaining the most significant variable in innovation.

3.2 Model Specification

**Model 1**

Based on the study of Gitua (2011) the following model was adapted with modification by authors in ascertaining the effect of innovation on bank efficiency.

\[
BANKEFF = \beta_0 + \beta_1(SERIN) + \beta_2(PRODIN) + \beta_3(PROIN) + \beta_4(ORGIN) + \epsilon_1
\]

Where:
- BANKEFF: Bank Efficiency
- SERIN: Service Innovation
- PRODIN: Product Innovation
- PROIN: Process Innovation
- ORGIN: Organizational Innovation
- \(\epsilon_1\) is the error term, equal

**Model 2**

The model determining the effect of bank efficiency on customers’ satisfaction was adopted from the study of Soterious and Zenious (1999)

\[
CUSAT = B_0 + \beta_1(BANKEFF)
\]

Where
- CUSAT: Customers Satisfaction
- BANKEFF: Bank Efficiency
- \(\epsilon_1\) is the error term, equal

**Model 3**

In determining the degree of effect of innovation on customers’ satisfaction, the following model was formulated by the authors based on literature reviewed.

\[
CUSAT = \beta_0 + \beta_1(SERIN) + \beta_2(PRODIN) + \beta_3(PROIN) + \beta_4(ORGIN) + \epsilon_1
\]

Where:
- CUSAT: Customers Satisfaction
- SERIN: Service Innovation
- PRODIN: Product Innovation
- PROIN: Process Innovation
- ORGIN: Organizational Innovation
H1: Innovation does not significantly affect Bank efficiency

<table>
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<tr>
<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>β</th>
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<tr>
<td>Innovation</td>
<td>0.761</td>
<td>0.4151</td>
<td>0.329</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.916</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>44.898** (0.007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.764</td>
<td></td>
<td></td>
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Using stepwise multiple regression the result shows that there is a significant relationship of 0.968 (96.8%) between Innovation and bank efficiency. The coefficient of determination reveals that 0.916 (91.6%) variation in bank efficiency is brought about by service innovation. While 8.4% variation is caused by other factors. The result reveals that among the observable measures of innovation (Service, Product, Process and Organization), it is only service innovation that determines bank efficiency while other variables are excluded. The Durbin-Watson Result of 1.764 shows that there is no presence of auto correlation. The standardized Beta shows that for every unit increase in innovation, bank efficiency increases by 0.761 units. The β= 0.329 indicates that there is a positive and direct relationship between innovation and bank efficiency.

On the test of hypothesis, the sig value at 95% significant level is 0.002. The F-Stat(44.898, P=0.002) indicates the model is significant at 0.05 level. It indicates that innovation is a reliable model in explaining customers’ satisfaction. The result reveals that innovation has a significant effect on bank efficiency.

**Test of Goodness fit**

All of the required paths were freely estimated, and error variances were constrained to one, which is by program default. The proposed structural equation model achieved a good fit ($\chi^2 = 421.314$, df = 79, p < 0.00; GFI = 0.92, IFI = 0.94, CFI = 0.91, RMSEA = 0.094). The path coefficients are reported in Figure 3.
Figure 3. Path Analysis

The estimated values of the coefficients of the structural equations give pivotal information about the ways in which innovation affects bank efficiency. The result reveals that service innovation is the main cause of innovation in deposit money banks. Furthermore, the path analysis shows that innovation plays a more significant role in determining bank efficiency and that service innovation is the main cause of bank efficiency.

**HYPOTHESIS 2**

$H_0$: Bank efficiency does not significantly affect and customers’ satisfaction.

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<th>Variable</th>
<th>B</th>
<th>SE</th>
<th>B</th>
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<tr>
<td>Bank Efficiency</td>
<td>.954</td>
<td>1.93748</td>
<td>0.436</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>14.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>2.482** (0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.518</td>
<td></td>
<td></td>
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</table>

Using ordinary least square regression the result shows that there is a positive relationship of 0.372 (37.2%) between bank efficiency and customers satisfaction. The coefficient of determination reveals that 0.149 (14.9%) variation in Customer Satisfaction is brought about by Bank Efficiency. While 85.1% of variation is caused by other factors. The Durbin-Watson Result of 1.518 shows that there is no presence of autocorrelation. The standardized Beta shows that for every unit increase in bank efficiency, customers’ satisfaction increases by .954 units. The β= .436 indicates that there is a positive and direct relationship between bank efficiency and customers satisfaction.

On the test of hypothesis, the sig value at 95% significant level is 0.037. The F-Stat (2.482, P=0.037) indicates that bank efficiency is a reliable model in explaining customers’ satisfaction. The study reveals that bank efficiency significantly affects customers satisfaction.

**4.3 Hypothesis 3**

$H_0$: Innovation does not significantly affect customer satisfaction.

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<th>Variable</th>
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<th>SE</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Innovation</td>
<td>1.213</td>
<td>1.93748</td>
<td>0.623</td>
</tr>
<tr>
<td>Adjusted $R^2$</td>
<td>91.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>46.222** (0.002)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson</td>
<td>1.022</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Using stepwise multiple regression the result shows that there is a significant relationship of 0.969 (96.9%) between Innovation and bank Customers’ Satisfaction. The coefficient of determination reveals that 0.919 (91.9%) variation in customers’ satisfaction is brought about by organization innovation. While 8.1% variation is caused by other factors. The result reveals that among the observable measures of innovation (Service, Product, Process and Organization), it is only organizational innovation that determines customers satisfaction while other variables are excluded. The Durbin-Watson Result of 1.022 shows that there is no presence of auto correlation. The standardized Beta shows that for every unit increase in innovation, bank efficiency increases by 1.213 units. The β= .623 indicates that there is a positive and direct relationship between innovation and customers satisfaction.

On the test of hypothesis, the sig value at 95% significant level is 0.02. The F-Stat(46.222, P=0.002) indicates the model is significant at 0.05 level. we reject H₀ and accept H₁. That is, Innovation significantly affects customers satisfaction.

**Test of goodness fit**

All of the required paths were freely estimated, and error variances were constrained to one, which is by program default. The proposed structural equation model achieved a good fit (χ² = 452.382, df = 79, p < 0.00; GFI = 0.93, IFI = 0.91, CFI = 0.96, RMSEA = 0.091). The path coefficients are reported in Figure 4.

**Figure 4:** Path Analysis

The estimated values of the coefficients of the structural equations show relevant information about the ways in which innovation affects bank efficiency. The result shows that service innovation is the main cause of innovation in deposit money banks. Furthermore, the path analysis reveals innovation plays a more significant role in determining customers’ satisfaction and that service innovation is the main cause of customers’ satisfaction in deposit money banks.

**Discussion**

The findings of the study reveal that Innovation affects bank efficiency. The first objective of the study was to determine the effect of innovations on the efficiency of deposit money banks in Nigeria. The result revealed that innovation affects bank efficiency. The result corroborates the findings of Sanatkani and Vasaf (2014) and Gitua (2011). It can be deduced from the findings that innovation is a significant factor in determining efficiency, therefore deposit money banks should do more in the area of innovations in order to be more efficient than competitors. The findings also show that service bank innovation among the other types of innovations has a positive influence on the efficiency of deposit money banks in Nigeria. That is, service innovation is the most significant factor in determining bank efficiency. This implies that banks should concentrate more on service innovation since the core of banking processes is service. The finding of this study is furthermore supported by the coefficient of determination (91.6%) which shows that the variations in bank efficiency are explained by bank innovation. The influence of innovations on efficiency is also statistically significant (F= 44. 898, p= 0.007 < 0.05) and hence the alternative hypothesis was accepted. This means that the influence is not by chance.

The second objective of the study sought to establish the nature of the effect that bank efficiency has on customers’ satisfaction. Results revealed that bank efficiency had a positive effect on Nigerian deposit money banks customers. The findings of this study further support the studies of Worimegbe et al (2018) and Soterious and Zenious (1999) that the more efficient a bank is, the more satisfied the customers are. Deposit money banks should, therefore, work towards better efficiency and concentrate efforts in the most productive way for resource utilization. This is supported by the coefficient of determination which revealed that 13.8 % of banks efficiency explains the variations in customers’ satisfaction. The test for significance also (F= 2.482, p= 0.037 < 0.05) showed that the influence was statistically significant and hence the alternative hypothesis was accepted.
The third objective of the study was to determine the influence of Innovation on customers’ satisfaction. The results showed that innovation has an effect on customers’ satisfaction. That is, as deposit money banks are more involved in innovation and especially in terms of service innovation, the more satisfied the customers are. Deposit money banks should relate more with their customers based on the feedback received from them in relation to the quality of service (tangibility, reliability, assurances, empathy and responsiveness and the degree of innovation in the service process. The analysis revealed that the coefficient of determination showed that 91.9% of variations in customers’ satisfaction is explained for by bank innovations. The significance test (F= 46.222, p= 0.002 < 0.05) showed that the influence of innovation on customers’ satisfaction is statistically significant and hence the alternative hypothesis was accepted.

4. Conclusion and Recommendation
The study examined innovation, bank efficiency and customers’ satisfaction in deposit money banks in Nigeria. The results of the study showed that Innovation affects both bank efficiency and customers’ satisfaction. The study established that innovation is a significant factor in determining efficiency; therefore deposit money banks should do more in the area of innovations in order to be more efficient than competitors. The more innovative a bank is, the more efficient it becomes and this in turn affects how customers are satisfied. Deposit money banks should relate more with their customers based on the feedback received from them in relation to the quality of service (tangibility, reliability, assurances, empathy and responsiveness and the degree of innovation in the service process. The study concludes innovation plays a more significant role in determining customers’ satisfaction and that service innovation is the main cause of customers’ satisfaction in deposit money banks. The study recommends that Deposit Money Banks should invest more on service innovation because this will yield better result on their efficiency and increase customers’ satisfaction. Deposit Money Banks should allocate resources in a way that they will maximize and increase efficiency which will in turn increase customer’s satisfaction.

REFERENCES


AN ECONOMETRIC ANALYSIS OF EXCHANGE RATE FLUCTUATIONS AND CRUDE OIL PRICE IN NIGERIA: GARCH APPROACH

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Abstract
Nigeria is a mono-product economy, where the main export commodity is crude oil and changes in oil prices has far reaching implications for the Nigerian economy and, in particular, exchange rate movements. The study examined primarily the effects of crude oil price on exchange rate fluctuations in Nigeria using yearly data from the year 1987 to 2016. Relevant descriptive and econometrics analysis were involved and the long run relationship among the variables were determined using the Johansen Co-integration technique while the Vector Correction Mechanism was used to examine the speed of adjustment of the variables from the short run dynamics to the long run. It was observed that a proportionate change in crude oil price leads to a more than proportionate change in exchange rate fluctuations in Nigeria by 2.8%. We, therefore, recommended that the Nigeria government should diversify from the Oil sector to other sectors of the economy so that Crude oil will no longer be the mainstay of the Nigerian economy.

Keywords: Crude oil price, Exchange Rate Fluctuation, GARCH, Productivity

I. Introduction
Exchange rate fluctuation is seen as a general phenomenon around the globe which might have adverse effect on macroeconomic performances. Economists are also interested in knowing how macroeconomic variables influence the operations of exchange rate especially in the developing countries. Among the developing countries, Nigeria experienced a unique downward trend in Naira value and frequent transactions in exchange rate system more often than not. These distinctive features make Nigeria economy an interesting case study for empirical investigation of the changes in crude oil prices and macroeconomic variability and its role in Naira exchange rate uncertainty.

Crude oil, on the other hand, is a key source of energy in Nigeria and in the world. Crude oil being an important part of the economy of Nigeria plays a strong role in influencing the economic and political fate of the country. Crude oil has generated great wealth for Nigeria, but its effect on the growth of Nigerian economy as regards returns and productivity is still questionable (Odulana 2007).

From the period of oil boom in 1970 till now, Nigeria has neglected her string agriculture and manufacturing bases in favour of unhealthy dependence on crude oil. New oil wealth has led to a concurrent decline of other sectors in the economy and has fueled massive migration to cities and led to increasingly widespread poverty especially in the rural areas. By implication, Nigeria’s job market has witnessed very high degree of unemployment, small wage and pitiable working environment (Adedipe, 2004 and Odulana, 2007). Between 1970 to 2007, Nigeria’s poverty rate increased from 36percent to about 89% and it is believed that oil revenue did not seen to add to the standard of living at this time but actually caused it to decline (Martin and Subra Manian, 2013).

Statistically, it was noted that exchange rate fluctuation and crude oil price fluctuation in Nigeria between 1987 and 2017 are closely related. The frequent swings in crude oil prices have important implications on exchange rate and external reserve accumulation in the country; crude oil fall from US$34.00 to US$17.01 per barrel between 1987 and 1990 and external reserve declined from US$4682.80 million to US$981.81 million, while exchange rate appreciated from N0.64 to N0.99 per dollar within the period under review. Similarly, crude oil price declined from $111.46 per barrel in 2011 to $63.28 per barrel at the end of 2014 and by August 2017, the crude oil price declined further to $52.04 per barrel and increased slightly to $54.1 per barrel in the first six months in 2018 (CBN 2017). This development has led to substantial reduction in external reserve and further depreciation of the exchange rate in the country.
The statistical information as revealed from the above potent that fundamentally oil price fluctuations has received important considerations for their presumed role on macroeconomic variables. Higher crude oil prices may reduce economic growth, generate shock exchange panics and produce inflation which eventually leads to monetary and financial instability. It will also lead to high interest rates and even a plunge into recession (Mckillop 2012). On the other hand, sharp increases in the international oil prices and the violent fluctuation of the exchange rate are generally regarded as one of the factors militating against economic growth in Nigeria (Jim, 2016).

Since oil price volatility directly affects the inflow of foreign exchange into the country, there is a need to investigate if it has direct impact on the Naira exchange rate fluctuation. The fact remain that oil market has been and will continue to be an ever changing economic phenomenon. This is because oil is vital to the world economy as it is present in everyone daily lives and its market is competitive globally (El-badri, 2011). Thus, it is on this note that this study seeks to find out the effect of crude oil price on exchange rate fluctuation and its effects on the Nigeria economy.

This study is divided into five sections; following this introduction is section two which presents the literature review. Section three considers the methodology of the study. Section four discusses model specification and analysis of data while section five covers the summary of findings, conclusion and policy recommendations.

II. Literature Review and Theoretical Framework
This section carries out comprehensive literature review of the topic from three main point of view; Literature Review, Theoretical Review and Empirical review.

2.0 Literature Review
The importance of oil in the Nigerian economy cannot be over emphasized. From an agrarian economy in the 1960’s the Nigerian economy has come to be known and identified as being oil-powered, with oil receipts accounting for over 70 percent of federal revenue and over 90 percent of foreign earnings (Ani et al, 2014).This situation comes with its attendant consequences one of which is the exposure of key macroeconomic variables such as inflation rate and exchange rate to oil price fluctuations. Indeed, oil prices have become so important to the Nigerian economy that principal economic policy makers at the CBN and the Federal Ministry of Finance factor them into economic policy decisions. This is due to the inevitable direct impact which oil prices have on the national budget which in turn is an instrument of fiscal policy (Ani et al, 2014).

There exists a sizeable volume of literature on the relationship between oil prices on the one hand and exchange rates or other macroeconomic variables on the other. Umar and Abdulhakeem (2010) examined how oil price shocks affect the macro economy using a VAR approach and found that oil price shocks had strong impact on GDP and money supply. In a similar manner, Ayadi, (2005) studied how oil price movements affect the Nigerian economy using vector autoregressive model and found that changes in oil prices affect real exchange rates and industrial production.

In addition, Igberaese, (2013) did a study on the impact of oil prices on Nigeria’s economic growth and found out that oil prices significantly impacted growth. Specifically, in the short run, high oil prices spurred growth but not in the long run. Also, Muritala et al. (2012) studied how oil and stock prices affect economic growth using Johansen method of cointegration and found that the variables have long-run relationship.

However, as far as oil prices and exchange rates are concerned, there seems to be a general consensus that oil price increases favour oil exporting nations. For example, Ogundipe et al. (2014) highlighted Krugman’s (1983) claim that increases in oil prices led to favourable exchange rate movements for oil-dependent economies while at the same time, falling oil prices favored the exchange rates of non oil-dependent economies. Furthermore, Sascha et al.(2012) stated that positive oil price shocks triggered currency appreciation for oil exporters and ultimately increased accumulated foreign reserves.

In addition, several other studies report that oil prices strongly impact exchange rate (Englama et al al, 2010).Nikbakht, (2009) studied the relationship between oil prices and exchange rate in OPEC countries using Johansen cointegration technique and found evidence in support of a long-run relationship between the variables. Englama et al. (2010) did a study on the impact of oil prices on exchange rate volatility in Nigeria and found that oil price shocks impacted strongly on exchange rate volatility. Oriavwote and Eriemo, (2012) did another study that examined the relationship between oil prices and real exchange rate in Nigeria. The results not only showed evidence for a long run relationship between oil prices and real exchange rates but also showed a unidirectional causality from oil prices to real exchange rate. In their study, Adeniyi et al (2012) observed that the Nigerian Naira appreciated against the US Dollar in response to increasing oil
prices. In addition, they reported that Amano and Van Norden (1998) investigated the causal link between oil prices and exchange rates in the USA, Germany and Japan and found that oil prices caused exchange rates in all three countries to fluctuate. Yoshizaki and Hamori (2013) had reported the observation of Gregorio and Wolf (1994) that the currencies of countries trading commodities responded to movements in the prices of those commodities.

They however argued that there could be exceptions to this rule as evidenced by the studies of Habib and Kalamova (2007). Another example of this exception is evidenced by the work of Ani et al. (2014) which examined the nature of causal relationship between four macroeconomic indicators including inflation rate, exchange rate, interest rate and real GDP in Nigeria using ordinary least squares and Granger causality approach. Interestingly, their results show that oil prices have no significant effect on real GDP and exchange rate. In another development, Ogundipe et al. (2014) examined how oil prices affected exchange rate volatility in Nigeria and concluded that changes in oil prices led to more than proportionate changes in exchange rates. Finally, Yusuf, (2015) also conducted a study to investigate the relationship between oil prices, exchange rate and economic growth. The results show that the variables are cointegrated and that oil prices and exchange rate were significant in predicting the economic growth.

In theory, changes in oil prices affect exchange rate through a country's terms of trade or through what we call "the wealth effect" in which there is a transfer of wealth from oil-exporting nations to oil-importing nations when oil prices fall and vice versa (Sascha et al. 2015). Also, in practice, oil-exporting nations usually accumulate foreign reserves when oil prices rise and during periods of falling prices, they tend to reduce foreign reserves holdings while trying to manage the depreciation of local currency caused by unfavorable exchange rate movement (Sascha et al. 2015).

From our discussion above, it is evident that there exists a substantial amount of literature on the relationship between oil prices and macroeconomic variables especially exchange rate. Some of these studies were done for countries that were already industrialized and are not oil exporters. The uniqueness of this study lies in the fact that it focuses on an oil-exporting economy striving to be industrialized and considers the period after the 2008 economic crisis. In addition, while most empirical studies have focused on modeling the volatility of exchange rate occasioned by oil price shocks, this study examines the causal link between oil prices and exchange rate and the impact of Nigeria's continued dependence on imports as well as its implications for exchange rate management by the monetary authorities.

2.1 Theoretical Review

The theoretical relationship between oil price shocks and exchange rates movement changes overtime due to several episodes of oil price fluctuations and their implications for real sector variables. There is no clear theoretical conclusion on the effect of oil price changes on exchange rate fluctuation and economic performance. However, some studies have emphasized the role of exchange rate in the transmission of oil prices to macroeconomic variables.

One of the insightful theories on the relationship between commodity prices, exchange rate and macroeconomic variables was developed by Dornbush (1987) using a partial equilibrium framework. This theory assumes an exogenous movement in the nominal exchange rate. The exchange rate movement and the near flexible money wage interact to produce cost shocks for some firms in the domestic and foreign countries, hence leads to a wide adjustment in prices.

Real exchange rate variability plays a major effect on the Dutch disease hypothesis; this involves the adverse effect of the discovery of natural gas on Dutch manufacturing companies which led to the subsequent appreciation of real exchange rate (Corden, 1984). The hypothesis indicates a positive relationship between oil prices and real exchange rates. The assumption of an exogenous exchange rate and sticky wages diminishes the empirical validation of this theory. Zeitz (1992) considered a macroeconomic model to determine how income and price elasticities of import demand are affected by oil price shocks and exchange rate changes. The general conclusion of the model shows that a rise in oil price increases in absolute terms the income and price elasticities of non-oil import demand. The model provides a useful framework in the prediction of the reaction of income-price elasticities for non-oil import demand to the changes in exchange rates. Hamilton (2008) used demand and supply framework to establish market clearance in the petroleum products market and emphasized the role of price and income elasticities in oil price shocks.

DePrratto et al (2009) developed a semi-structural New-Keynesian model of an open economy based on the IS-LM framework. The model shows that oil price changes have temporary and persistent effects on output via the supply and demand sides of the economy. Three major channels were identified. An increase in oil prices shift the IS curve (demand side), this affect the Philip's curve through inflationary effects
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(supply side) and affect the growth rate of potential output (output effect). However, this analysis undercut the role of exchange rate in the transmission of oil price changes to the monetary and real sectors of the economy.

2.2 Empirical Review

Empirical studies on the effect of oil prices on the macro economy have provided different results on the relationship. Some studies have shown that an oil price increase had positive effect on exchange rate and the growth of an economy (Shafi and Hua, 2014; Jiranyakul, 2015). Others have concluded that increase in the price of oil could have detrimental effects on exchange rate and macroeconomic performance (Hamilton, 1983; Gosh et al, 2009; Elder and Serletis, 2010). The findings largely depend on whether the economies in question are oil exporting or importing and the degree of their dependency on oil. Some studies in the U.S. provide some striking conclusions on the subject. In an insightful paper, Hamilton (1983) revealed a strong causal and negative relationship between oil price and real GNP; oil price was found to have contributed to some of the U.S. recession. Hamilton and Hererra (2004) established that monetary policy measures may not have strong effects in reducing oil price shocks. In a similar study on the U.S economy, Raymond and Rich (1997) employed the Markov State Switching approach to analyze the effect of oil price shocks on post war business cycle fluctuations. It was revealed that the behaviour of oil prices has been a contributing factor to the slow growth of output. However, the movement in oil prices has not been a major determinant in the slow growth process of the U.S.

Gosh et al (2009) employed error correction model to determine the effect of oil price shocks on U.S. economic growth. The finding was that oil prices reduced GDP which supported the argument of Hamilton (1983). In a similar study, Lee et al (1995) argued that oil prices could have greater impact on real GNP in an environment where oil prices are less volatile than in an environment where oil prices fluctuation are persistent. It was further posited that a positive normalized shocks largely affect growth while negative normalized shocks pose no effect on output growth in the U.S. Hillard (1998) shows that a significant part of oil prices uncertainty in the U.S. was due to adjustments within the energy sector and not within the rest of the economy. Gronwald (2008) found that consumer and import prices are also affected by oil price increases. The impact of oil price shocks on real GDP growth in the U.S. was largely attributed to the oil price shocks of 1973-74, 1979 and 1991.

A non-linear approach was adopted by Akram (2004) to investigate the relationship between oil prices and exchange rates in Norway. Evidence from the study revealed a negative relationship between exchange rates and crude oil prices. The study conducted by Elder and Serletis (2010) showed that volatility of oil prices has a negative effect on consumption and aggregate output. The effect of oil price uncertainty was found to exert statistically significant effect on durable consumption and fixed investment.

Jiranyakul (2015) examined the relationship between real oil price and real effective exchange rate using Autoregressive Distributed Lags model. It was reported that an increase in real oil price volatility leads to increase in real exchange rate volatility which has harmful effects on trade. The study revealed no evidence of cointegration and causality among the variables.

3. Methodology and Model Specification

This section deals with issues relative to theoretical framework, model specification, description of variables, and sources of data.

3.1 Theoretical Frame Work

The theoretical framework of this study is based on Generalized Autoregressive Conditional Heteroskedasticity modeled by Tim Bollerslev (1986) and Exponential General Autoregressive Conditional heteroskedastic modeled by Daniel Nelson (1991).

The models were used to estimate the relationship between exchange rate and oil price changes in small open economy like Nigeria. This model is similar to the one developed by Stancik (2007), Firmuc and Horvath (2008) and Hassan (2009) for developing economies to capture the influence of fundamental factors and variability in exchange rate regimes designed by many Central Banks and is consistent with the theoretical expository of exchange rate model. Bollerslev introduced the GARCH model by extending the work of Robert Eglle (1982) framework and has been popular since the early 1990s. In the recent time, it is used by several professionals in many areas including trading, investing, hedging and dealing in various financial instruments.

According to the model, the daily nominal return on exchange rate is denoted as grex, while the daily nominal return on oil price is denoted as groil. The daily returns are computed as follows:
$\text{grex}_t = \log (\text{er}_t)$  

$\text{3.1}$  

$\text{groil}_t = \log (\text{brent}_t)$  

$\text{3.2}$

grex, is an indicator for the daily returns on exchange rate, while er, represents naira-dollar exchange rates for period's t and er-1, is the lag of naira-dollar exchange rates. For the nominal oil returns, groil, represents the daily returns on oil price, brent, is the daily spot price for Brent crude oil for the periods t and brent-1, is the lag of the daily spot price for Brent crude oil.

GARCH (1, 1) specification takes the form:

$$a + \zeta \text{groil}_t + \mu_t \sim N(0, \delta^2)$$  

$\text{3.3}$  

$$h_t = \alpha_0 + \alpha_1 \mu^2_{t-1} + \beta h_{t-1}$$  

$\text{3.4}$

The equation of the mean is a function of a constant, one regressor and an error term. The error term is called white noise $(0, \delta^2)$. The variance equation for GARCH (1, 1) is written as a function of a constant term, the ARCH term which means Autoregressive Conditional Heteroskedasticity captures reports about volatility from the earlier period measured as the lag of squared residuals from the mean equation and the last forecast period. The coefficients and $\beta$ are positive to make sure the conditional variance $h_t$ is always positive (Roman, 2010). The non-negativity restrictions are considered necessary to guarantee that $>0$ in all periods and the upper bound $\alpha + \beta<1$ is required in order to make the $h_t$ stationary and consequently the unconditional variance finite (Soderlind, 2011). The condition $\alpha + \beta<1$ may not be met due to persistent instability of many financial time series but a unity sum of both and leading to the integrated GARCH (IGARCH). Nevertheless even if a GARCH is not covariance stationary, Nelson (1990), Bougerol and Picard (1992) and Lumsdaine (1991) and Wang (2003) observed that standard asymptotically based inference procedures are generally valid.

An alternative GARCH equation, the (GARCH-M) GARCH-in-mean is also considered in this study, by incorporating the conditional variance in to the mean equation and it takes the following form.

$$\text{grex}_t = a + \zeta \text{groil}_t + \lambda h_t + \mu_t$$  

$\text{3.5}$

Translating equation (3.5) into functional relationship, we have

$$\text{grex}_t = f (\text{groil}_t)$$  

$\text{3.6}$

Higher order GARCH $(q, p)$ can be estimated with the variance equation taking the form:

$$h_t = \alpha_0 + \sum_{i=1}^{q} \alpha_i \mu^2_{t-i} + \sum_{i=1}^{p} \beta_i h_{t-i}$$  

$\text{3.7}$

Nelson (1991) first brought up the Exponential GARCH or EGARCH model as an alternative to the GARCH model due to the perceived problems with standard GARCH $(q, p)$ model. The EGARCH captures asymmetric responses of the time varying variance to shocks and ensures variance is positive. The representation of the EGARCH variance takes the form:

$$\ln(\delta^2) = \alpha_0 + \phi \ln(\delta^2) + \gamma + \chi$$

$$\sqrt{\frac{\delta_{t-1}}{2}} \cdot \sqrt{\frac{\delta_{t-1}}{2}} - \frac{\gamma}{\pi} \cdot z$$

$$\mu_{t-1} = \mu_{t-1}$$

$\text{3.8}$

The parameters to be estimated are $\alpha_0$, $\phi$, $\gamma$ and $\chi$. The left hand side is the log of the conditional and unconditional variance; hence the leverage effect is exponential as opposed to quadratic with the estimates of the conditional variance guaranteed to be positive. Also being written in terms of log make $h_t>0$ hold without any restrictions on parameters.

De Granwe and Rosiers (1987) define unconditional variance as observed ex-post variance while conditional variance is the variability of the unexpected part of the time series. Unconditional variance is represented by the standard measure of variance (or standard deviation), a crude measure of total risk of financial assets. On the other hand conditional variance captures the true measure of uncertainly and it reflects uncertainly about a variance given a model and information set. Conditional fluctuations or volatility models include
3.2 Model Specification

In line with the GARCH model theory which makes the exchange rate dependent on the oil price. A model was constructed to include: FOREX supply and demand for external reserves and domestic interest rate.

\[ \text{REER} = f(\text{cop, fxres, dr}) \]  
\[ \text{REER} = \beta_0 + \beta_1 \text{cop} + \beta_2 \text{fxres} + \beta_3 \text{dr} \]  
\[ \log\text{REER}_t = \beta_0 + \beta_1 \log\text{cop}_t + \beta_2 \log\text{fxres}_t + \beta_3 \log\text{dr}_t + \mu_t \]

Where:

- Reer = Real Effective Exchange Rate
- Cop = Crude oil Price
- Fxres = Foreign Exchange Reserve
- Dr = Domestic Interest Rate
- LogReer = Log of Real Exchange Rate
- LogCop = Log of Crude Oil Price
- LogFxres = Log of Foreign Exchange Reserve
- LogDr = Log of Domestic Interest Rate
- \( \beta_0 \): = constant term
- \( \beta_1 - \beta_3 \): = elasticity coefficients
- \( \mu_t \): = stochastic disturbance term

The A priori expectation provides expected signs and significance of the value of the coefficient of the model parameters to be estimated in light of economic theory and empirical evidence.

There are sound theoretical reasons for believing strong positive links exist between oil price and exchange rate. While, negative links exist between the explained variable, external reserves and FOREX supply.

1. The coefficient of the crude oil price is expected to be positive that is the slope of the coefficient \( \beta_1 > 0 \) which shows that ceteris paribus a country dependent on a resource, for it major revenue will definitely affect the exchange rate of the country and influences its movement, causing it to move in the same direction that it moves.
2. The coefficient of the interest rate is expected to be positive \( \beta_2 > 0 \). Higher domestic interest rates attract foreign investments and lead to currency demand increase, which in turn results in exchange rate increase.
3. The coefficient of the foreign external reserves is expected to be negative \( \beta_3 < 0 \) which shows that an increase in foreign reserves will lead to a decrease in exchange rate volatility.

3.2 Data Sources and Descriptions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description/Measurements</th>
<th>Data Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>OIL PRICE (oilp)</td>
<td>The price of crude oil is stated in US dollars. Oil price is the price at which oil is sold per barrel each day in the international oil market. It is measured in US dollars</td>
<td>BP statistical review of energy 2012</td>
</tr>
<tr>
<td>EXTERNAL RESERVES(er)</td>
<td>This is the amount of revenue saved by country from trading with other nations. It is measured in US dollars millions</td>
<td>CBN statistical bulletin 2011</td>
</tr>
<tr>
<td>Interest rate (int)</td>
<td>It is the charge for borrowing money, usually measured as the percentage ratio between the sum payable to the lender and the payable to the lender and the amount borrowed, at an annual rate. The amount of money contractually promised at certain specified future dates as a proportion of the principal borrowed.</td>
<td>CBN statistical bulletin 2011</td>
</tr>
</tbody>
</table>
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EXCHANGE RATE It is the price of a country currency expressed in terms of one unit of another country’s currency. It is measure as the exchange rate of the naira to the dollar.

3.3 Limitations to the Study
The limitations of this study were mostly data related. We originally wanted to use FOREX supply as one of the independent variable but the data available was only from the year 1996 to 2011. Another limitation was error in estimation a characteristic of secondary data.

4. Empirical Finding and Analysis
This section presents the empirical finding using the yearly time series data generated from various issues of Central Bank of Nigeria (CBN) and Statistical Bulletin for the period of 30 years 1987 to 2016 as indicated in the attached Appendix A.

4.1 Descriptive analysis
The descriptive analysis helps us ascertain the statistical relationship and trend analysis among the variables employed in this study; most importantly, the pattern of relationship between exchange rate fluctuation, crude oil price and other macroeconomic variables as depicted in table 1 and fig. 2 &3 below:

Table 1: Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>LREER</th>
<th>LCOP</th>
<th>LFXRES</th>
<th>LDR</th>
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<tbody>
<tr>
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<td>8.217029</td>
<td>2.78981</td>
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<td>MEDIAN</td>
<td>4.524582</td>
<td>3.026665</td>
<td>8.266310</td>
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<td>10.97632</td>
<td>3.586016</td>
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<td>-5.981081</td>
<td>0.512824</td>
<td>4.757376</td>
<td>1.791759</td>
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<tr>
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<td>0.947471</td>
<td>1.519066</td>
<td>0.433827</td>
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<tr>
<td>SKEWNESS</td>
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<td>-0.836974</td>
<td>-0.216131</td>
<td>-0.292339</td>
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<td>KURTOSIS</td>
<td>1.946100</td>
<td>4.115855</td>
<td>2.782401</td>
<td>2.041773</td>
</tr>
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<td>JARQUE BERA</td>
<td>1.964263</td>
<td>7.082890</td>
<td>0.409850</td>
<td>2.205082</td>
</tr>
<tr>
<td>PROBABILITY</td>
<td>0.374512</td>
<td>0.028971</td>
<td>0.814708</td>
<td>0.332021</td>
</tr>
</tbody>
</table>

Source: computed by author using E-views 5.0

The first two descriptive statistics that is the mean and median are measures of central tendency for all the variables. The LREER has the highest standard deviation (deviation from the mean) while LDR has the lowest standard deviation.

The Jarque Bera is a test for normality of the distribution where the null hypothesis is that the distribution of the sample is a normal one. If the probability value of the Jarque bera test is significant, then the null hypothesis is rejected and the alternative is accepted which says that the sample is not normally distributed. If each variable is statistically significant (indicated by a zero probability), then the series is not normally distributed. Therefore the farther the probability statistic of a variable is to zero, the lower the value of its Jarque Bera statistic and the more normally distributed it is (and vice versa). From the results above, the Jarque Bera tests shows that the null hypothesis is strongly accepted for all the distribution. Hence, the variables can be described to be normally distributed in the following order (from the highest to the lowest): external reserves, exchange rate fluctuation, interest rate and oil price.

4.2 Trend Analysis
This section presents vivid display of time plot of real exchange rate fluctuation (REER), foreign exchange reserve (FXRES), domestic interest rate (DR), crude oil price (COP). This was plotted over time (1987–2016).

4.2.1 Trend of Exchange Rate Fluctuations, Crude Oil Price and Domestic Interest Rate
The figure 1. shows that exchange rate fluctuations, crude oil price and foreign interest rate are moving in somewhat same direction, although the value of Nigeria crude oil price was far above foreign interest rate and exchange rate fluctuations, both exchange rate fluctuations and foreign interest rate has galloping upward and downward intersecting one another. Evidently, the three variables have been very unpredictable in their trend.
4.1.2 Trend of Exchange Rate Fluctuations, Crude oil price, Foreign Exchange Reserve and Domestic interest rate

The figure 2: shows that both Crude oil price and Exchange rate fluctuation are positively slope indicating that their value has been on the persistent increase over the period. The level of fluctuation in these two variables are relatively predictable. However, both the Foreign exchange reserves and exchange rate fluctuations were well below crude oil price and domestic interest rate in some years.
4.3 Econometric analysis
The econometric analysis would help us achieve the objective of finding if oil price influences exchange rate fluctuation in Nigeria. Therefore the econometric analysis would investigate the short run and long run effects of oil price on exchange rate fluctuation.

4.3.1 Test for Unit Root
Unit root test is carried out to determine if the variables are stationary and if not, to determine their order of integration (i.e. number of times they are to be differenced to achieve stationarity). In standard econometric analysis of the data used in research, a stationary test was carried out; this is due to the fact that most time series data are non-stationary. The Augmented Dickey Fuller test (ADF) test for unit roots and the Phillips Perron (PP) test were conducted for at the time series employed in the study. The Augmented Dickey Fuller (ADF) result and the Phillips Perron test show that LREER, LCOP, LFXRES and LDR are all integrated series of order I (1). The results are shown in tables 4.2.1

Table 2: Augmented Dickey - Fuller and Phillips Perron test for unit root

<table>
<thead>
<tr>
<th>Variables</th>
<th>Augment -ed Dickey fuller test (ADF)</th>
<th>Phillips Perron PP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level</td>
<td>Order Integration</td>
</tr>
<tr>
<td>LEXRV</td>
<td>-</td>
<td>I(0)</td>
</tr>
<tr>
<td>LOILP</td>
<td>2.137543</td>
<td>I(0)</td>
</tr>
<tr>
<td>LER</td>
<td>2.207279</td>
<td>I(0)</td>
</tr>
<tr>
<td>LIMIT</td>
<td>2.048322</td>
<td>I(0)</td>
</tr>
</tbody>
</table>

Source: Computed by Author using E-views 5.1
* Variable stationary at 1%, 5% and 10% critical values.
** Variables stationary at 5% and 10% critical values
*** Variables stationary at 10% critical values

The table above shows that all the variables are not stationary at level. This can be seen by comparing the observed values (in absolute terms) of the Augmented Dickey fuller (ADF) test AND Phillips Perron test statistics with the critical value (also in absolute terms) at 1%, 5% and 10% level of significance. As a result of this, the variables were differenced once and from the table above it can be seen that the variables are stationary at first difference, since all the variables are integrated of the same order.

4.2.3 Johansen Maximum likelihood Test of Cointegration
The major aim of this test is to find out if a linear combination of the integrated variable is becomes stationary over the long-run, if it is, then it means cointegration exists among the variables, this further implies that there exist a long run relationship among the variables. The johansen co integration test commenced with the test for the number of co integrating relations or rank using Johansen’s maximum Eigen value and the trace test. The results are shown on tables 3 below:
Table 3: Johansen Maximum Likelihood Test of Cointegration

<table>
<thead>
<tr>
<th>Number of Cointegrating equation H₀:</th>
<th>Trace Statistic 0.05 Critical value</th>
<th>Maximum Eigen value 0.05 Critical value</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>79.88171 63.87610</td>
<td>40.88306 32.11832</td>
</tr>
<tr>
<td>At most 1*</td>
<td>38.99865* 42.91525*</td>
<td>18.28741* 25.82321*</td>
</tr>
<tr>
<td>At most 2</td>
<td>20.71124 25.87211</td>
<td>14.19844 19.38704</td>
</tr>
<tr>
<td>At most 3</td>
<td>6.512805 12.51798</td>
<td>6.512805 12.51798</td>
</tr>
</tbody>
</table>

* Source: Computed by the Author using E-views 5.0

The two tests produced the same result. The trace statistical test rejected the null hypothesis (H₀) that there is no cointegrating relationship between the variables and the test base on the maximum Eigen value also rejected the null hypothesis. They both show that there is one cointegrating equation at the 0.05 level of significance. Since the two tests are giving the same result, it shows that there is a cointegrating equation. The result of the cointegration test showed that LREER, LCOP, LFXRES and LDR have equilibrium condition which keeps them in proportion to each other in the long run.

The exactly identifying estimates of the Johansen Maximum Likelihood estimates showing the Cointegrating Coefficients normalized to LREER are shown table 4 below. They are very useful in understanding the long run relationships among cointegrating variables.

Table 4: Normalized Cointegrating Coefficients

<table>
<thead>
<tr>
<th>Variables</th>
<th>LREER</th>
<th>LCOP</th>
<th>LFXRES</th>
<th>LDR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coefficients</td>
<td>1.000000</td>
<td>2.860249</td>
<td>-0.531970</td>
<td>-0.532029</td>
</tr>
<tr>
<td>Standard Error</td>
<td>(0.3.1751)</td>
<td>(0.29149)</td>
<td>(0.91854)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9.0083</td>
<td>-1.70905</td>
<td>0.0012114</td>
<td></td>
</tr>
</tbody>
</table>

Source: Computed by author using E-views 5.

The model is in double logged form, the co-efficient estimates can be interpreted in terms of long run elasticity and the t-statistics is used to determine the statistical significance of each variable. Based on the rule of thumb, a variable is said to be statistically significant if the absolute value of its t-statistic is approximately 2 or above.

The major relationship of interest is that which exists between oil price and exchange rate volatility in Nigeria. From the table oil price is elastic in relation to exchange rate volatility, meaning that in the long run, a change in oil price will cause a more than proportionate change in exchange rate volatility and the t-statistic of LCOP shows that the co-efficient is statistically significant.

4.3.4 The Vector Error Correction Model

The ECM coefficient is known as the speed adjustment factor, it tells how fast the system adjusts to restore equilibrium. It captures the reconciliation of the variables over time from the position of disequilibrium to the period of equilibrium (Ogundipe, Ojeaga and Ogundipe, 2013). The result of the vector correction model (VECM) is shown on table 4.3.5 the basic criteria for analyzing VECM are:

1. The VECM must lie between 0 and 1
2. It must be negative for it to be meaningful

If it is positive there is no error correction and it diverges and the T-statistic must be significant i.e. it must be greater than 2.

Table 5: Vector Error Correction Model result

<table>
<thead>
<tr>
<th>Variables</th>
<th>ECM(-1)</th>
<th>T-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(LREER)</td>
<td>-0.633566</td>
<td>-10.2559</td>
</tr>
<tr>
<td>D(LCOP)</td>
<td>-0.037631</td>
<td>-1.11319</td>
</tr>
<tr>
<td>D(LFXRES)</td>
<td>-0.011029</td>
<td>-0.13882</td>
</tr>
<tr>
<td>D(LDR)</td>
<td>-0.012318</td>
<td>-0.60156</td>
</tr>
</tbody>
</table>
The speed of adjustment co-efficient for LREER is 0.633566. The VECM is correctly signed and in terms of magnitude it lies between 0 and 1. This significance supports cointegration and as it shows that there exists a long run steady between exchange rate fluctuation and the explanatory variables. Precisely the error correction model in this equation means that about 63.35% of errors generated between each period are correlated in subsequent periods. It should be noted the period of adjustment of the relevant variables to the normal equilibrium condition spanned within a decade as demonstrated in the trend analysis presented above. However, this result is sizeable and also significant judging from the value of the T-statistic [-10.2559].

5. Summary, Conclusion and Recommendations

5.1 Summary

This study set to find out primarily if oil price has a significant influence on exchange rate fluctuation in Nigeria over the periods of 30 years 1987-2016. The study secondly also looked at other microeconomic factors such as foreign exchange reserve and domestic interest rate that can influence exchange rate in Nigeria. To achieve these objectives, a model specification was formulated in equation (3.9) based on GARCH Approach model. In the model exchange rate fluctuation was the dependent variable and the independent variables were crude oil price, foreign exchange reserves and domestic interest rate.

The study started with the descriptive statistics and trend analysis of the variables and this analysis were complimented with the use of relevant econometrics diagnostics test. The Augmented Dickey Fuller (ADF) and the Phillips Perron (PP) tests were used to find out if the variables were stationary and to what degree. The variables were found to be stationary at first difference, then the Johansen test of cointegration was performed on the integrated variables, they were found to be cointegrated and so the normalized coefficient were reported. The result of oil price, external reserves and interest rate did not follow the a priori expectations and the probable reasons were given looking at the Nigerian situation. The Vector Error Correction Model (VECM) was employed to reconcile the short run deviations to the long run equilibrium path. The ECM(-1) coefficient of the vector of concern (DLREER) was rightly signed. The result appeared sizeable judging from the value of the T-statistic. Therefore the alternative hypothesis that oil price has a significant influence on exchange rate fluctuation should be accepted.

5.2 Conclusion

Firstly, the study was carried out primarily to determine the effects of oil price on exchange rate fluctuation in Nigeria. The result obtained was in line with a prior expectation of the study. It showed that a proportionate change in crude oil price leads to a more than proportionate change in exchange rate fluctuation by 2.86. This indicates a change in international oil price will have a greater effect than expected on exchange rate fluctuation in Nigeria. In the long run the coefficient of elasticity of 2.8% implies that exchange rate fluctuation is elastic to changes in the crude oil price since the coefficient is greater than one. It is statistically significant based on the t-statistic.

Firstly, Crude oil is the mainstay of Nigeria’s economy. It affects all her economic activities and influences all macroeconomic variable including exchange rate.

Secondly, the result obtained showed that a proportionate change in foreign exchange reserves leads to a less than proportionate change in exchange rate fluctuation. This was in line with a prior expectation of the study. This means that a change in foreign exchange reserves for Nigeria will have less than the expected change in exchange rate fluctuation in Nigeria. In the long run the coefficient of elasticity of 0.53% implies that exchange rate fluctuation is inelastic to changes in exchange rate fluctuation since the coefficient is less than one. Based on the rule of thumb that a variable is said to be statistically significant if the absolute value of the t-statistic is approximately 2 or above, that means a significant relationship exist between foreign exchange reserves and exchange rate fluctuation.

According to Ketil (2004) a reasonable level of foreign exchange reserves is sufficient to reduce a country’s exchange rate fluctuation. Nigeria’s external reserve increases when oil revenue increase and this external reserve can be used to reduce exchange rate fluctuation.

Thirdly, a proportionate change in domestic interest rate leads to a less than proportionate change in foreign exchange reserves. This was not in line with a prior expectation of the study. This means that a change in Nigeria’s interest rate will have a smaller effect than expected on exchange rate fluctuation. In the long run the coefficient of elasticity of 0.53% implies that exchange rate fluctuation is inelastic to changes in Nigeria’s interest rate since the coefficient is less than one. This implies that a change in
Nigeria's interest rate will not have a significant impact on exchange rate fluctuation in Nigeria and it is not statistically significant looking at the t-statistic.

When a country’s domestic interest rate is high, it attracts investment from abroad which increases its exchange rate fluctuation but when inflation in the country is high like in Nigeria, it mitigates the influence of interest rate on exchange rate fluctuation.

### 5.3 Policy Recommendations

Policy lessons that can be drawn from these conclusion and findings are three folds.

- First, it is necessary for Nigeria’s economy to be diversified since shocks in crude oil price had deleterious effect on macroeconomic variables in the country.
- Second, government pursuit of managed float exchange rate is desirable to ensure a substantial increase in the external reserve without significant damage of the exchange rate of the country.
- Third, an effective management and stabilization of crude oil price by Organization of Petroleum Exporting Countries (OPEC) could reduce the adverse effect of its shocks on economic performance of Nigeria.

In view of the above, it is therefore, recommended that the government should implement measures aimed at reshaping the structure of our trade. Specifically, there is an urgent need to encourage the manufacturing of high-end, value added goods and services in Nigeria which if implemented, will reduce the demand for dollar for importation purposes. This in turn will limit the necessity for intervention of the CBN in the foreign exchange market and the depletion of the nation’s foreign reserves will be curtailed.

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Umar, A. & Soliu, U. *The Foreign Exchange rates in Nigeria: Convergence and Divergence*

## APPENDIX A

<table>
<thead>
<tr>
<th>Year</th>
<th>REER</th>
<th>COP ($)</th>
<th>FXRES Millions</th>
<th>DR (%)</th>
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<td>4.0179</td>
<td>18.39</td>
<td>5213</td>
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<tr>
<td>1988</td>
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<td>15.00</td>
<td>6022</td>
<td>17.60</td>
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<td>7.3916</td>
<td>18.30</td>
<td>3663</td>
<td>24.60</td>
</tr>
<tr>
<td>1990</td>
<td>8.0378</td>
<td>23.85</td>
<td>3358</td>
<td>27.70</td>
</tr>
<tr>
<td>1991</td>
<td>9.9095</td>
<td>20.11</td>
<td>4052</td>
<td>20.80</td>
</tr>
<tr>
<td>1992</td>
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<td>19.61</td>
<td>2783</td>
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<td>1993</td>
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<td>4902</td>
<td>36.09</td>
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<td>16.25</td>
<td>7944</td>
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<td>2695</td>
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<td>21.16</td>
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<td>8592</td>
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<tr>
<td>2003</td>
<td>129.3565</td>
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<td>2004</td>
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<td>2005</td>
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<td>75.81</td>
<td>44650</td>
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<td>49200</td>
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<tr>
<td>2016</td>
<td>129.5000</td>
<td>77.60</td>
<td>49520</td>
<td>14.98</td>
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</table>
ABSTRACT

The health sector has remained under-developed and the quality of life of an average citizen has worsened with the health status of Nigerians consistently attracting a low ranking. The study investigated the effect of public health expenditures on three levels of health outcomes: life expectancy, death rate and mortality rate in Nigeria by estimating an Autoregressive Distributed Lag (ARDL) Model using annual time series data from 1981 to 2016 within a health production framework. The results show that in the short run, public health expenditure is significant at 1% and has a negative coefficient of 0.33 implying that a percentage increase in public health expenditure reduces death rate by 33%. Primary health expenditure has a negative coefficient of 0.266 implying that a percentage increase in primary health expenditure will reduce death rate by 26.6%. In the long run, public health expenditure, education and primary health expenditure all reduce death rate as expenses on them increase. The coefficient of the error correction term (ECT) that is represented by CointEq(-1) is significant at 5%. This suggests that 10.2% of deviation from the long-run equilibrium level of death rate is corrected for, annually. The findings suggest that public health expenditure represents an important driver of positive health outcomes in Nigeria. Government should therefore increase the funding of public health and also put in place punitive measures to curtail corruption that has limited the effect of increasing level of public health expenditure on health outcomes.

Keywords: Public health expenditure, Health outcomes, Life expectancy, Infant mortality rates, Death Rates

Word count: 241

1. Introduction

Health outcomes are important indices for measuring human well-being and indeed of human development. Health outcomes have been described as measures of the end result of what happens to patients or individuals as a consequence of their encounter(s) with a particular disease or the healthcare system, (Krousel-Wood, 1999). Health outcomes can be classified into two categories; positive and negative health outcomes. The positive health outcomes for people include being alive; mental, physical and social wellbeing. Negative outcomes include death, and malfunction. Meanwhile, diseases are the intermediate factors that influence the likelihood of achieving a state of positive health outcomes.

Health expenditures are broadly defined as spending activities performed either by institutions or individuals through the application of medical, paramedical, and/or nursing knowledge and technology, the primary purpose of which is to promote, restore, or maintain health. There are two main categories of health expenditures which are the public and private health expenditures, the public source refers to health expenditure by all government and its agencies, while the private sources are households who spend directly out of their pockets at the point of buying health services or indirect pre-payment by engaging third party agency called insurance or through assistance from NGOs.

Fifty percent of economic growth differentials between developed and developing nations is attributable to ill-health and low life expectancy (World Health Organization [WHO], 2015). Developed countries spend a high proportion of their Gross Domestic Product (GDP) on health care because they believe that their residents’ health can serve as a major driver of economic growth and development (Boachie, and Kofi, 2017). The pattern of health financing is therefore closely and indivisibly linked to the quality of health outcomes capable of achieving the long term goal of enhancing nation’s economic development (Riman, 2012).

The health status of Nigerians is consistently ranked low despite the huge government expenditure on health provision. Nigeria ranked 74th out of 115 countries, based on the performance of some selected health indicators (World Bank, 2015). Nigerian overall health system performance was also ranked 187th among the 191 Member States by the World Health Organization. (WHO, 2016). It therefore becomes imperative to ask
1.1 Trend Analysis of Health Expenditure and Health Outcomes in Nigeria

The trend analysis of the various indicators of health outcomes in Nigeria such as life expectancy rate at birth, infant mortality and death rates from 1981-2016 is presented in Table 1.1. Death rate is almost constant over the years, but declines slightly in the period of 1999-2001 and further declines almost constantly till 2016, where it experiences a further decline. Also, life expectancy is almost constant up until 1993 where it starts to rise, up until 2004 where it begins to rise further up until 2016. Public health expenditure also experiences a series of increase and decline till it finally rises to its peak in 2016. Infant mortality rate on the other is quite high and starts to decline slowly over the years from 1981 up until to 2004. It then declines faster from 2005 up to 2016.

Table 1.1: Averages of Public Health Expenditure and Health Outcomes in Nigeria

<table>
<thead>
<tr>
<th>YEAR</th>
<th>PuHE($)</th>
<th>LE</th>
<th>DR</th>
<th>IMR</th>
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<tr>
<td>1981-1984</td>
<td>52.338</td>
<td>46.123</td>
<td>18.703</td>
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<td>1985-1988</td>
<td>48.975</td>
<td>46.283</td>
<td>18.42</td>
<td>125.1</td>
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<td>1989-1992</td>
<td>45.612</td>
<td>46.105</td>
<td>18.368</td>
<td>125.8</td>
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<td>1993-1996</td>
<td>44.453</td>
<td>46.108</td>
<td>18.203</td>
<td>123.7</td>
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<td>1997-2000</td>
<td>37.384</td>
<td>46.4</td>
<td>17.83</td>
<td>116.05</td>
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<td>2001-2004</td>
<td>29.903</td>
<td>47.468</td>
<td>16.903</td>
<td>104.4</td>
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<tr>
<td>2005-2008</td>
<td>70.997</td>
<td>49.52</td>
<td>15.32</td>
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<td>2009-2012</td>
<td>84.58</td>
<td>51.513</td>
<td>13.838</td>
<td>80.2</td>
</tr>
<tr>
<td>2013-2016</td>
<td>122.341</td>
<td>52.938</td>
<td>12.785</td>
<td>70.468</td>
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</table>

Source: Author`s computation from data sourced from WDI, 2017

2. Literature Review

Several theories from the literature have been able to establish a link between health expenditure and outcome from the economic point of view. Notable among these theories is the growth oriented theory among which are (Anyanwu and Erhijakpor, 2009; Nketiah-Amponsah, 2019; Keya, 2015, Edeme, 2017, Filmar and Pritchett, 1999, and Bein, Unlucan, Olowu, and Kalifa, 2017). It posited that only macroeconomic condition explains most of the differences in child and infant mortality rate while public healthcare expenditure does not have any significant positive impact on health sector performance. However, Gupta and Verhoeven (2001) used cross-country data to affirm the importance of public spending on health in determining health outcomes. Reinforcing the above school of thought is an empirical study carried out by Hanmer, Lensink and White (2003) which shows evidence that support the importance of public health intervention and refutes the view that economic growth is the main determinants of child health outcome.

Arthur and Oaikhenan (2017) examined the effect of health expenditure on health outcomes in sub-Sahara African (SSA) countries. The findings indicate that health expenditure has a significant but inelastic effect on health outcomes in SSA, reducing mortality rates and improving life expectancy at birth.


A few studies conducted in Nigeria on healthcare expenditure and outcomes remained inconclusive. Rahman, Bassey and Edu (2011) examined healthcare expenditure in Nigeria; as to determine whether the level of government spending for the period between 1980 and 2003 has any impact on economic development of the nation. Their finding is that life expectancy as well as literacy rate were negatively correlated with healthcare expenditure. The above view was also reign-forced by Olayinka and Olayiwola (2013) in a paper on health expenditure and health status in northern and southern Nigeria.

Edeme.et al (2017) investigates the effect of public health expenditure on health outcomes in Nigeria, as captured by life expectancy at birth and infant mortality rates. The result shows that public health expenditure and health outcomes have long-run equilibrium relationship and increase in public health expenditure improves life expectancy and reduces infant mortality rates.
Reinforcing the above, Imouhiele, (2013) empirically examines the determinants of public health expenditure in Nigeria. Using the error correction techniques and time series data from 1986 to 2010, the results show that demand for health in Nigeria is price inelastic. They concluded that total population of children that falls within the age of 0 - 14 years and health expenditure share in gross domestic product are the major determinants of health expenditure in Nigeria. To this end, the study recommended that annual government budgetary allocation to health sector should be increased to 15% of gross domestic product in order for government health expenditure to have a robust effect Nigerians health status and meet WHO recommendation.

3. Theoretical Framework

The study considered Edeme et al (2017) model to examine the impact of public health expenditure on health outcomes. This theoretical model assumes that individual health status is a function of individual inputs and is specified as:

\[ Y = f(W) \]

Where \( Y \) measures individual health status and \( W \) represents individual inputs to the health function. Health expenditure is used as a proxy for healthcare. Aggregate health expenditure is also considered to allow for the estimation of overall effect of the utilization of healthcare on the health status of the population. Using the World Bank Development Indicator data set for 2017, Auto Regressive Distributed Lag (ARDL) models were estimated to determine the effects of public healthcare expenditure on health outcomes in Nigeria. The main variables in the models were total health expenditure, public health expenditure, private health expenditure, GDP per capita, life expectancy at birth, crude death rate and infant mortality rate.

3.1 Model Specification

The Model adopted from the work of Edeme, et. al. (2017) was modified to suppress population and include education, death rate, total government expenditure and total health expenditure. The modified model in its implicit form is specified as follows:

\[ HEO_i = \beta_0 + \beta_1 PuHE_i + \beta_2 PrHE_i + \beta_3 PCI_i + \beta_4 GHE_i + \beta_5 GTE_i + \beta_6 EDU_i + e_i \ldots (1) \]

Where, \( HEO \) represents three levels of health outcomes which are Life expectancy at birth, Infant mortality and Death rate.

Therefore, the equations to be estimated can be re-specified as follows:

\[ LE_i = \alpha_0 + \alpha_1 PuHE_i + \alpha_2 PrHE_i + \alpha_3 PCI_i + \alpha_4 GHE_i + \alpha_5 GTE_i + \alpha_6 EDU_i + e_i \ldots (2) \]

\[ IMR_i = \beta_0 + \beta_1 PuHE_i + \beta_2 PrHE_i + \beta_3 PCI_i + \beta_4 GHE_i + \beta_5 GTE_i + \beta_6 EDU_i + e_i \ldots (3) \]

\[ DR_i = \gamma_0 + \gamma_1 PuHE_i + \gamma_2 PrHE_i + \gamma_3 PCI_i + \gamma_4 GHE_i + \gamma_5 GTE_i + \gamma_6 EDU_i + e_i \ldots (4) \]

Where,

- \( HEO \) = health outcomes,
- \( LE \) = life expectancy at birth (measured as life expectancy at birth per 1000 live births)
- \( IMR \) = infant mortality rates (measured as infant mortality rate per 1000 live births)
- \( DR \) = death rates (measured as mortality rate per 1000 people)
- \( PuHE \) = public health expenditure (measured as a percentage of total health expenditure)
- \( PrHE \) = private health expenditure (measured as a percentage of total health expenditure)
- \( PCI \) = per capita income (measured as GDP per capita, constant)
- \( GTE \) = Gross total expenditure
- \( GHE \) = Gross health expenditure
- \( EDU \) = secondary school enrolment as a percentage of gross enrolment.

**ARDL Model Specification:**

\[
\Delta LE = \alpha + \beta_1 \Delta LE_{t-1} + \beta_2 \Delta EDU_{t-1} + \beta_3 \Delta ln GDP PC_{t-1} + \beta_4 \Delta GHE_{t-1} + \beta_5 \Delta ln GTE_{t-1} + \beta_6 \Delta PRHE_{t-1} + \mu_t
\]

\[
+ \beta_7 \Delta PUHE_{t-1} + \sum_{i=1}^{j} \sigma_{9i} \Delta LE_{t-i} + \sum_{i=1}^{j} \sigma_{9i} \Delta EDU_{t-i}
\]

\[
+ \sum_{i=1}^{j} \sigma_{10i} \Delta ln GDP PC_{t-i} + \sum_{i=1}^{j} \sigma_{11i} \Delta GHE_{t-i} + \sum_{i=1}^{j} \sigma_{12i} \Delta ln GTE_{t-i} + \sum_{i=1}^{j} \sigma_{13i} \Delta PRHE_{t-i}
\]

\[
+ \sum_{i=1}^{j} \sigma_{14i} \Delta PUHE_{t-i} + \mu_t
\]
\[ \Delta IMR = \alpha + \beta_1 \Delta IMR_{t-1} + \beta_2 \Delta EDU_{t-1} + \beta_3 \Delta lnGDPPC_t - 1 + \beta_4 \Delta GHE_{t-1} + \beta_5 \Delta lnGTE_{t-1} + \beta_6 \Delta PRHE_{t-1} \\
+ \beta_7 \Delta PUHE_{t-1} + \sum_{i=1}^j \sigma_i \Delta IMR_{t-i} + \sum_{i=1}^j \sigma_i \Delta ln EDU_{t-i} \]
\[ + \sum_{i=1}^j \sigma_i \Delta GHE_{t-i} + \sum_{i=1}^j \sigma_i \Delta lnGTE_{t-i} + \sum_{i=1}^j \sigma_i \Delta PUHE_{t-i} + \mu_i \]

\[ \Delta DR = \alpha + \beta_1 \Delta DR_{t-1} + \beta_2 \Delta EDU_{t-1} + \beta_3 \Delta lnGDPPC_t - 1 + \beta_4 \Delta GHE_{t-1} + \beta_5 \Delta lnGTE_{t-1} + \beta_6 \Delta PRHE_{t-1} \\
+ \beta_7 \Delta PUHE_{t-1} + \sum_{i=1}^j \sigma_i \Delta DR_{t-i} + \sum_{i=1}^j \sigma_i \Delta ln EDU_{t-i} \]
\[ + \sum_{i=1}^j \sigma_i \Delta GHE_{t-i} + \sum_{i=1}^j \sigma_i \Delta lnGTE_{t-i} + \sum_{i=1}^j \sigma_i \Delta PUHE_{t-i} + \mu_i \]

3.2 Estimation Technique and Sources of Data
This study opted for the ARDL estimation technique because it is preferable when dealing with variables that are integrated of different orders and also because of its ability to choose appropriate number of lags for each of the independent variables and the most parsimonious model automatically.
This study employed the use of annual series data as a result of the nature of the variables employed in the estimated model. Data used for this research is sourced from World Development Indicator (WDI, 2016).

3.3 Preliminary Analysis: Descriptive Statistics and Correlation Analysis
The result from the Descriptive Analysis in table 4.1 show that we have 36 observations and the average increase of Life expectancy over the period is 3.86%, Also Education (EDU), GDP per capital (GDPPC) and gross total expenditure (GTE) recorded average increase of 3.39%, 12.39% and 27.23% respectively. Infant mortality, also recorded an average increase of 4.65% all over the period. Meanwhile, private health expenditure (PRHE) and public health expenditure (PUHE) recorded little increment of 0.89% and 0.65% respectively over the period.
However, the behaviour of the series included in our model shows that they have been relatively stable over time. The correlation analysis in table 4.2 analysis shows that there is positive relationship among the variables except infant mortality that have negative relationships with all the other variables.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DR</td>
<td>2.81</td>
<td>2.88</td>
<td>2.94</td>
<td>2.52</td>
<td>0.14</td>
<td>-0.90</td>
<td>2.30</td>
<td>5.64</td>
<td>0.06</td>
<td>101.06</td>
<td>0.64</td>
<td>36.00</td>
</tr>
<tr>
<td>EDU</td>
<td>3.39</td>
<td>3.30</td>
<td>3.95</td>
<td>2.83</td>
<td>0.28</td>
<td>0.47</td>
<td>2.30</td>
<td>2.04</td>
<td>0.36</td>
<td>122.06</td>
<td>2.76</td>
<td>36.00</td>
</tr>
<tr>
<td>GDPPC</td>
<td>12.39</td>
<td>12.27</td>
<td>12.88</td>
<td>12.06</td>
<td>0.27</td>
<td>0.59</td>
<td>1.76</td>
<td>4.42</td>
<td>0.11</td>
<td>446.18</td>
<td>2.60</td>
<td>36.00</td>
</tr>
<tr>
<td>GHE</td>
<td>1.11</td>
<td>1.07</td>
<td>1.50</td>
<td>0.70</td>
<td>0.23</td>
<td>-0.04</td>
<td>1.79</td>
<td>4.21</td>
<td>0.33</td>
<td>39.93</td>
<td>1.87</td>
<td>36.00</td>
</tr>
<tr>
<td>GTE</td>
<td>27.24</td>
<td>26.40</td>
<td>29.25</td>
<td>26.10</td>
<td>1.30</td>
<td>-0.04</td>
<td>1.55</td>
<td>5.77</td>
<td>0.67</td>
<td>980.51</td>
<td>59.24</td>
<td>36.00</td>
</tr>
<tr>
<td>IMR</td>
<td>4.65</td>
<td>4.75</td>
<td>4.84</td>
<td>4.21</td>
<td>0.21</td>
<td>-0.81</td>
<td>2.19</td>
<td>4.92</td>
<td>0.06</td>
<td>167.46</td>
<td>1.54</td>
<td>36.00</td>
</tr>
<tr>
<td>LE</td>
<td>3.87</td>
<td>3.84</td>
<td>3.98</td>
<td>3.83</td>
<td>0.05</td>
<td>-0.34</td>
<td>4.84</td>
<td>5.94</td>
<td>0.97</td>
<td>139.35</td>
<td>0.90</td>
<td>36.00</td>
</tr>
<tr>
<td>PUHE</td>
<td>-0.66</td>
<td>-0.34</td>
<td>0.39</td>
<td>-3.47</td>
<td>0.05</td>
<td>-1.33</td>
<td>-0.12</td>
<td>12.89</td>
<td>0.90</td>
<td>-23.65</td>
<td>0.54</td>
<td>36.00</td>
</tr>
<tr>
<td>PRHE</td>
<td>0.90</td>
<td>0.59</td>
<td>1.14</td>
<td>0.59</td>
<td>0.11</td>
<td>-0.04</td>
<td>1.33</td>
<td>3.13</td>
<td>0.98</td>
<td>32.40</td>
<td>0.54</td>
<td>36.00</td>
</tr>
</tbody>
</table>

Source: Authors’ estimation from E-views 9
Table 4.2: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>EDU</th>
<th>GDPPC</th>
<th>GHE</th>
<th>GTE</th>
<th>INFANT MORT</th>
<th>LIFE EXPECT</th>
<th>PCHE$_$</th>
<th>PRHE</th>
<th>PUHE</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU</td>
<td>1.00</td>
<td>0.86</td>
<td>0.66</td>
<td>0.88</td>
<td>-0.93</td>
<td>0.94</td>
<td>0.64</td>
<td>0.56</td>
<td>0.37</td>
</tr>
<tr>
<td>GDPPC</td>
<td>0.86</td>
<td>1.00</td>
<td>0.62</td>
<td>0.94</td>
<td>-0.93</td>
<td>0.95</td>
<td>0.77</td>
<td>0.63</td>
<td>0.52</td>
</tr>
<tr>
<td>GHE</td>
<td>0.66</td>
<td>0.62</td>
<td>1.00</td>
<td>0.76</td>
<td>-0.73</td>
<td>0.69</td>
<td>0.36</td>
<td>0.65</td>
<td>0.76</td>
</tr>
<tr>
<td>GTE</td>
<td>0.88</td>
<td>0.94</td>
<td>0.76</td>
<td>1.00</td>
<td>-0.94</td>
<td>0.96</td>
<td>0.72</td>
<td>0.57</td>
<td>0.58</td>
</tr>
<tr>
<td>IMR</td>
<td>-0.93</td>
<td>-0.93</td>
<td>-0.73</td>
<td>-0.94</td>
<td>1.00</td>
<td>-0.99</td>
<td>-0.65</td>
<td>-0.56</td>
<td>-0.58</td>
</tr>
<tr>
<td>LE</td>
<td>0.94</td>
<td>0.95</td>
<td>0.69</td>
<td>0.96</td>
<td>-0.99</td>
<td>1.00</td>
<td>0.72</td>
<td>0.57</td>
<td>0.52</td>
</tr>
<tr>
<td>PCHE$_$</td>
<td>0.64</td>
<td>0.77</td>
<td>0.36</td>
<td>0.72</td>
<td>-0.65</td>
<td>0.72</td>
<td>1.00</td>
<td>0.64</td>
<td>0.13</td>
</tr>
<tr>
<td>PRHE</td>
<td>0.56</td>
<td>0.63</td>
<td>0.65</td>
<td>0.57</td>
<td>-0.56</td>
<td>0.57</td>
<td>0.64</td>
<td>1.00</td>
<td>0.30</td>
</tr>
<tr>
<td>PUHE</td>
<td>0.37</td>
<td>0.52</td>
<td>0.76</td>
<td>0.58</td>
<td>-0.58</td>
<td>0.52</td>
<td>0.13</td>
<td>0.30</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Source: Authors’ estimation from Eviews 9

The results of the unit root tests are presented in Table 4.3. In general terms, it indicates that only infant mortality, life expectancy and private health expenditure are stationary at level, while education, gross health expenditure, GDP per capital, gross total expenditure, private health expenditure, and public health expenditure were found to be non-stationary at level, but are stationary at first difference.

Table 4.3: Unit Root Test Result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Augmented-Dickey Fuller</th>
<th>Philips-Perron</th>
<th>Stationarity order</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Level</td>
<td>1st difference</td>
<td>Level</td>
</tr>
<tr>
<td>EDU</td>
<td>-0.304524</td>
<td>-3.811808*</td>
<td>-1.065922</td>
</tr>
<tr>
<td>GHE</td>
<td>-1.641099</td>
<td>-9.536164*</td>
<td>-1.907872</td>
</tr>
<tr>
<td>IMR</td>
<td>-9.127402*</td>
<td>-3.900560**</td>
<td>-0.949013</td>
</tr>
<tr>
<td>GDPPC</td>
<td>0.497391</td>
<td>-4.423189*</td>
<td>0.234137</td>
</tr>
<tr>
<td>GTE</td>
<td>-0.332042</td>
<td>-6.80899*</td>
<td>-0.386587</td>
</tr>
<tr>
<td>LE</td>
<td>-3.715416**</td>
<td>-1.924337</td>
<td>-0.648627</td>
</tr>
<tr>
<td>PCHE$_$</td>
<td>-1.107223</td>
<td>-5.815123*</td>
<td>-1.148739</td>
</tr>
<tr>
<td>PRHE</td>
<td>-3.791859*</td>
<td>-10.67779*</td>
<td>-3.791859*</td>
</tr>
<tr>
<td>DR</td>
<td>-1.847911</td>
<td>-3.388387***</td>
<td>-0.310685</td>
</tr>
</tbody>
</table>

Source: Authors’ estimation from Eviews 9; Note: *, ** and *** indicate rejection of the null hypothesis of non-stationarity (there is unit root) at 1%, 5%, and 10% significance level respectively.

4.2 Impact of Public Health Expenditure on Life Expectancy Rate.

The estimation result on the impact of public health expenditure on life expectancy rate in Nigeria is presented in Table 4.4. In both the short and long run, all the variables have negative signs except gross health expenditure suggesting that increases in per capital income, primary and secondary health expenditure all reduce life expectancy but they are not significant. Also, education has a negative coefficient of 0.132% and it is significant at 10% suggesting that a percentage increase in education expenses reduces life expectancy by 13%. The coefficient of the error correction term (ECT) that is represented by CointEq(-1) is significant at 10%. This also suggests that 10.2% of deviation from the long-run equilibrium level of Life Expectancy rate is corrected for annually.
## Table 4.4: Empirical Result of the Impact of Public Health Expenditure on Life Expectancy Rate.

### Short Run Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(EDU)</td>
<td>-0.0132***</td>
<td>0.006591</td>
<td>-2.01395</td>
<td>0.054895</td>
</tr>
<tr>
<td>D(GHE)</td>
<td>0.204454</td>
<td>0.262769</td>
<td>0.778072</td>
<td>0.443829</td>
</tr>
<tr>
<td>D(LGDPPC)</td>
<td>-0.1235</td>
<td>0.355982</td>
<td>-0.34692</td>
<td>0.731553</td>
</tr>
<tr>
<td>D(LGTE)</td>
<td>-0.01444</td>
<td>0.085702</td>
<td>-0.16845</td>
<td>0.867582</td>
</tr>
<tr>
<td>D(PRHE)</td>
<td>-0.26599</td>
<td>0.280658</td>
<td>-0.94774</td>
<td>0.352333</td>
</tr>
<tr>
<td>D(PUHE)</td>
<td>-0.32699</td>
<td>0.231146</td>
<td>-1.41464</td>
<td>0.16951</td>
</tr>
<tr>
<td>D(@TREND())</td>
<td>-0.00584</td>
<td>0.010888</td>
<td>-0.53656</td>
<td>0.596317</td>
</tr>
<tr>
<td>CointEq(-1)</td>
<td>-0.102***</td>
<td>0.052491</td>
<td>-1.94319</td>
<td>0.063334</td>
</tr>
</tbody>
</table>

### Long Run Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU</td>
<td>-0.13013</td>
<td>0.109004</td>
<td>-1.19385</td>
<td>0.243744</td>
</tr>
<tr>
<td>GHE</td>
<td>2.004455</td>
<td>3.315592</td>
<td>0.604554</td>
<td>0.550923</td>
</tr>
<tr>
<td>LGDPPC</td>
<td>-1.21077</td>
<td>3.440097</td>
<td>-0.35196</td>
<td>0.727819</td>
</tr>
<tr>
<td>LGTE</td>
<td>-0.14154</td>
<td>0.893788</td>
<td>-0.15836</td>
<td>0.875447</td>
</tr>
<tr>
<td>PRHE</td>
<td>-2.60777</td>
<td>3.71188</td>
<td>-0.70255</td>
<td>0.488829</td>
</tr>
<tr>
<td>PUHE</td>
<td>-4.78647</td>
<td>3.313704</td>
<td>-1.44445</td>
<td>0.161031</td>
</tr>
<tr>
<td>C</td>
<td>42.54349</td>
<td>29.21773</td>
<td>1.456085</td>
<td>0.157814</td>
</tr>
<tr>
<td>@TREND</td>
<td>-0.05728</td>
<td>0.132279</td>
<td>-0.433</td>
<td>0.668729</td>
</tr>
</tbody>
</table>

**Source:** Authors' estimation from E-views. Note: ***, ** and * represent 1%, 5% and 10% level of significance respectively.

### 4.3 Effect of Public Health Expenditure on Infant Mortality Rate

The empirical result of the effect of public health expenditure on infant mortality rate is presented in Table 4.5. In the short run, only public health expenditure is significant at 1% but it has positive coefficient of 4.339 thus suggesting that a percentage increase in public health expenditure increases infant mortality rate by 43%. In the long run, gross total expenditure became significant at 5% with a negative coefficient of 5.81. This suggests that a percentage increase in gross health expenditure will reduce infant mortality rate by 58% which agrees with other findings in the literature that expenditure on health significantly reduce infant mortality rate (Rahaman, Rasheda and Maisha, 2018; Nketiah-Amponsah, 2019).

The coefficient of the error correction term (ECT) that is represented by CointEq(-1) is significant at 5%. This also suggests that 10.2% of deviation from the long-run equilibrium level of infant mortality rate is corrected for annually.

## Table 4.5: Empirical Result of the Impact of Public Health Expenditure on Infant Mortality Rate

### Short Run Coefficient

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(EDU)</td>
<td>-0.01327</td>
<td>0.034726</td>
<td>-0.38224</td>
<td>0.705791</td>
</tr>
<tr>
<td>D(GHE)</td>
<td>0.204454</td>
<td>0.977629</td>
<td>0.21006</td>
<td>0.836186</td>
</tr>
<tr>
<td>D(LGDPPC)</td>
<td>-0.1235</td>
<td>1.290806</td>
<td>-0.09568</td>
<td>0.924607</td>
</tr>
<tr>
<td>D(LGTE)</td>
<td>-0.26599</td>
<td>0.271016</td>
<td>-0.98146</td>
<td>0.336578</td>
</tr>
<tr>
<td>D(PRHE)</td>
<td>-0.16123</td>
<td>1.043233</td>
<td>-0.15455</td>
<td>0.878525</td>
</tr>
<tr>
<td>D(PUHE)</td>
<td>4.339417*</td>
<td>1.02704</td>
<td>4.225168</td>
<td>0.000321</td>
</tr>
<tr>
<td>D(@TREND())</td>
<td>-43.8041</td>
<td>0.035179</td>
<td>-1245.17</td>
<td>4.85E-57</td>
</tr>
<tr>
<td>CointEq(-1)</td>
<td>-0.102*</td>
<td>0.02799</td>
<td>-3.67038</td>
<td>0.001271</td>
</tr>
</tbody>
</table>

### Long Run Coefficient

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU</td>
<td>-0.13013</td>
<td>0.314382</td>
<td>-0.41394</td>
<td>0.682755</td>
</tr>
<tr>
<td>GHE</td>
<td>2.004455</td>
<td>9.313825</td>
<td>0.215213</td>
<td>0.831498</td>
</tr>
<tr>
<td>LGDPPC</td>
<td>-1.35231</td>
<td>14.20448</td>
<td>-0.0952</td>
<td>0.924978</td>
</tr>
<tr>
<td>LGTE</td>
<td>-5.8135**</td>
<td>2.589178</td>
<td>-2.24532</td>
<td>0.034657</td>
</tr>
<tr>
<td>PRHE</td>
<td>-1.5807</td>
<td>10.02492</td>
<td>-0.15768</td>
<td>0.876088</td>
</tr>
<tr>
<td>PUHE</td>
<td>42.48622**</td>
<td>18.14652</td>
<td>2.341287</td>
<td>0.028249</td>
</tr>
<tr>
<td>C</td>
<td>-429.454</td>
<td>206.1547</td>
<td>-2.08316</td>
<td>0.048542</td>
</tr>
<tr>
<td>@TREND</td>
<td>-429.454</td>
<td>116.7528</td>
<td>-3.67832</td>
<td>0.001246</td>
</tr>
</tbody>
</table>

**Source:** Authors' estimation from E-views. Note: ***, ** and * represent 1%, 5% and 10% level of significance respectively.
4.4 Effect of Public Health Expenditure on Death Rate

The estimation result of the impact of Public health expenditure on death rate is presented in Table 4.6. In the short run, public health expenditure is significant at 1% and has a negative coefficient of 0.33 implying that a percentage increase in public health expenditure reduces death rate by 33%. The result further shows that education has a negative coefficient of 0.013 and it is significant at 5%. This suggests that a percentage increase in education reduces death rate by 1.3%. PRHE has a negative coefficient of 0.266. This implies that a percentage increase in PRHE will reduce death rate by 26.6%. This result confirms other findings in the literature that expenditure on public health, primary health and education have the effect of reducing death rate (Keya, 2015, Edeme, 2017, Bein, Unlucan, Olowu, and Kalifa W. (2017).

In the long run, public health expenditure, education and primary health expenditure are all significant at 1%, 5% and 10% respectively and they have inverse relationship with death rate thus implying that death rate will fall as expenses on them increase. This confirms the finding of The coefficient of the error correction term (ECT) that is represented by CointEq(-1) is significant at 5%. This suggests that 10.2% of deviation from the long-run equilibrium level of death rate is corrected for, annually.

Table 4.6: ARDL Analysis of the Effect of Public Health Expenditure on Death Rate

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(EDU)</td>
<td>-0.01327**</td>
<td>0.005328</td>
<td>-2.49116</td>
<td>0.019731</td>
</tr>
<tr>
<td>D(GHE)</td>
<td>0.204454***</td>
<td>0.117327</td>
<td>1.742599</td>
<td>0.093694</td>
</tr>
<tr>
<td>D(LGDP)</td>
<td>-0.1235</td>
<td>0.258737</td>
<td>-0.47731</td>
<td>0.637287</td>
</tr>
<tr>
<td>D(LGTE)</td>
<td>-0.01444</td>
<td>0.064929</td>
<td>-0.22235</td>
<td>0.82585</td>
</tr>
<tr>
<td>D(PRHE)</td>
<td>-0.26599***</td>
<td>0.131865</td>
<td>-2.01715</td>
<td>0.054538</td>
</tr>
<tr>
<td>D(PUHE)</td>
<td>-0.32699**</td>
<td>0.097021</td>
<td>-3.37026</td>
<td>0.002441</td>
</tr>
<tr>
<td>D(@TREND)</td>
<td>-0.00584</td>
<td>0.007141</td>
<td>-0.81809</td>
<td>0.421033</td>
</tr>
<tr>
<td>CointEq(-1)</td>
<td>-0.102**</td>
<td>0.042167</td>
<td>-2.41894</td>
<td>0.023175</td>
</tr>
</tbody>
</table>

Long Run Coefficients

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDU</td>
<td>-0.13013</td>
<td>0.065248</td>
<td>-1.99446</td>
<td>0.057115</td>
</tr>
<tr>
<td>GHE</td>
<td>2.004455</td>
<td>1.142448</td>
<td>1.754527</td>
<td>0.091591</td>
</tr>
<tr>
<td>LGDP</td>
<td>-1.21077</td>
<td>2.512417</td>
<td>-0.48191</td>
<td>0.634059</td>
</tr>
<tr>
<td>LGTE</td>
<td>-0.14154</td>
<td>0.614673</td>
<td>-0.23027</td>
<td>0.819758</td>
</tr>
<tr>
<td>PRHE</td>
<td>-2.60777</td>
<td>1.481421</td>
<td>-1.76031</td>
<td>0.090586</td>
</tr>
<tr>
<td>PUHE</td>
<td>-4.78647</td>
<td>2.232435</td>
<td>-2.14406</td>
<td>0.041942</td>
</tr>
<tr>
<td>C</td>
<td>42.54349</td>
<td>20.51391</td>
<td>2.073885</td>
<td>0.048542</td>
</tr>
<tr>
<td>@TREND</td>
<td>-0.05728</td>
<td>0.054797</td>
<td>-1.04525</td>
<td>0.305908</td>
</tr>
</tbody>
</table>

Source: Authors’ estimation from E-view 9. Note: ***, ** and * represent 1%, 5% and 10% level of significance respectively.

5. Conclusion

This study examined the effect of health expenditure in Nigeria from 1981 to 2016 considering three levels of health outcomes: life expectancy, infant mortality and death rate. The results contradict the a priori expectations that Life expectancy and Public health expenditure have positive correlation. Rather, it shows a negative relationship among the variables. The results further show that Infant Mortality rate and Public health expenditure are positively related thus suggesting that as Public Health Expenditure increases, infant mortality rate also increases. One of the possible reasons for this negative relationship between Life expectancy and public health expenditure may be corruption because with the growing increase in amount being allocated to public healthcare, it is expected that increase in public health expenditure will influence life expectancy positively and reduce infant mortality rate if the budgeted funds actually get to the target sector.

Another possible reason for the positive relationship between Infant Mortality rate and Public health expenditure may be the level of education of mothers since the results show negative relationship between education and infant mortality rate both in the short and long run. This implies that a higher education rate will result in lower Infant mortality rate. However, death rate has a negative relationship with Public Health expenditure indicating that as public health expenditure increases, death rate falls. This is an indication that government needs to do more in the area public health funding in order to improve health outcomes.
Recommendations
As a result of the findings of this study that public health expenditure remains an important factor for improving health outcomes in Nigeria, the following recommendations are made:

- The government should increase the funding of public health and also put in place punitive measures to curtail corruption that has limited the effect of the increasing level of public health expenditure on health outcomes.
- Nigerian government should set up a mechanism to constantly assess the performance of its health policies. This can be done by establishing a unit within the federal and state ministry of health and in local governments saddled with the task of conducting studies in partnership with the private sector on the allocation and efficiency on public health spending.
- Women especially those in rural areas should also be educated by organizing programmes that will help to educate them on child-care, the importance of Anti-natal and post-natal care, etc.

REFERENCES


Abstract

The study examined the impact of gender diversity in board rooms on firm value of deposit money banks in Nigeria. The study was anchored on the resource based theory. The ex-post factor research design was adopted with the use of secondary data obtained from the annual reports of selected banks. A sample of sixteen banks was purposively drawn from the population of twenty-two listed deposit money banks on the floor of the Nigerian stock exchange as at December, 2017 over a seven year period (2011-2017). The regression analysis was adopted for empirical evidence. Findings from the study show a positive but non-significant relationship between number of female board members and firm value of the sampled banks. The study therefore concludes that gender diversity in board rooms has no significant impact on the firm value of deposit money banks in Nigeria. This study recommends that Nigerian deposit money banks should tactfully increase the small percentages of women currently on their boards.

Keywords: Gender diversity, board rooms, firm value, resource based theory

Word count 161

1.1 Introduction

The role of women in business cannot be over-emphasized. Women contribute numerous ideas, energy and capital resources to their communities, as well as generate jobs and other spin-off business linkages (Valsan, 2015). As such, benchmarking female participation in firm ownership, management, and the workforce is important to achieving gender equality promotion and empowerment of women.

The World Bank enterprise survey (2014) of manufacturing firms in 139 countries, Nigeria inclusive, provides information that 35.1% of the firms are with female participation in ownership and 14.5% of the firms have majority women ownership while 18.6% hold top manager position in the sampled firms. Specifically, the World Bank enterprise survey report (2014) on Nigeria provides that 16.2%, 13.2% and 13.9% of the sampled firms are with female participation in ownership, have majority women ownership and hold top manager position respectively.

The African development bank’s (AfDB) gender equality index, for year 2015, rates Nigeria as one of the African countries with high gender equality haven ranked 23rd (out of 52 countries) with an overall score of 54.7%. The AfDB index assessed countries on the dimensions of equality in opportunities; human development as well as equality in law and institutions. Nigeria’s rating showed higher gender equality under dimension of equality in opportunities which include opportunities in business and employments with a score of 66.2% earning her the 18th position under the category. Nigeria earned 59% under the dimension on equality in human development and 39.1% in equality in law and institutions. The need to increase female participation on corporate boards arose as a result of legal requirement owing to the low average number of women on the boards of corporations (Gallego, García & Rodríguez, 2010) as well as the inherent advantages of doing so.

In 2014, the Central bank of Nigeria through a circular instructed that 30% of board of directors of Nigerian banks should be women. However, a recent report by Daily Trust (2018) provides that women occupy only 22.3% board seats of twenty-one banks in Nigeria. The directive was to enhance gender equality and to ensure benefits associated with implementing such directives such as access to funds from Development Financial Institutions (Daily Trust, 2018).

1.2 Statement of problem

A number of studies have been carried out in developed countries examining the relationship between gender diversity and corporate performance using variety of accounting ratios (Gallego et al., 2010; Dang & Vo, 2012). Previous studies from developing countries include those of Shafique, et al., (2014); Mohammed, Abdullatif and Zakzouk (2018), among others, carried out in Pakistan and Jordan respectively. Prior study on
There is scarce literature as opined by Oba and Fodio (2013) thus recommending more research efforts on the subject matter. The focus of their study was on other sectors excluding the financial sector; this is another basis for this study on gender diversity and firm value of deposit money banks in Nigeria. This explains the motivation for this study. Arising from current interest in this area of study, this paper examines the impact of gender diversity, measured by the number of female board members, on the firm value of deposit money banks in Nigeria. Going by existing arguments of a logical expectation for gender diversity to impact on financial performance and the mixed results from other climes, this study proposes to test this hypothesis:

\[ H_1: \text{There is a positive and significant relationship between number of female board members and firm value of deposit money banks in Nigeria.} \]

The remaining parts of this paper include the review of literature, methodology, analysis and discussion of findings. Conclusion and recommendations were also made.

2.0 Literature Review

2.1 Conceptual review

Gallego, et al. (2010) defined diversity as “the range of ethnic and gender representation on boards of directors”. Gender diversity deals with the blend of female and male representation in the workplace, particularly as board members. According to Erhardt, Werbel and Shrader (2003), gender diversity in the board room tend to signify absence of discrimination. Gender diversity has the potential of improving economic performance of companies (Solimene, Coluccia & Fontana, 2017).

Boards are commonly responsible for strategic planning, allocation and monitoring of resources within an organization (Erhardt, et al., 2003). Women as members of the board of directors can be seen as a different and important characteristic of the board. In that, women tend to have more knowledge about the market compared to the male directors and are able to apply what they know to aid decision making (Shafique, Idress & Yousaf, 2014). However, diversity in board rooms tend to suffer from delay in decision making owing to divergent views arising from different backgrounds and perspectives (Erhardt, et al., 2003; Shafique, et al., 2014).

Women have more knowledge and greater influence on the market because they control majority of the purchasing decisions in the home which has a multiplier effect on the economy. Duc and Thuy (2013) suggest that female board members can influence career development of junior staff members. Female board members also have the potential to help others have a better understanding of the business environment and the tendency to drive firm value (Dang & Vo, 2012).

Firm value is a measure of performance and the most crucial way of measuring a firm's financial health (Rajhans & Kaur, 2013). Firm value is a reflection of corporate decisions, a duty of the boards. Tobin Q, a measure of firm value, measures the assets of a firm in relation to its market value (Wolfe & Sauaia, 2003).

2.2 Underpinning Theory: Resource based theory

The study was anchored on the resource based theory. The resource based theory is a strategic management theory which became operational in the 1980s (Elgar, 2012). The theory emphasizes the role of a firm’s strategic resources in enhancing performance. Here, resources include the factors of production such as human, financial, physical, reputational, organizational among others. Elgar (2012) classified a firm’s human capital to include the insights and attributes of collection of individuals associated with the firm. The theory posits that resources are key indicators of competitive advantage and performance. The theory is chosen due to its vast use in previous studies on gender diversity and performance.

2.3 Empirical Review

Erhardt, et al. (2003) examined the relationship between demographic diversity on boards of directors with firm financial performance. This relationship was examined using 1993 and 1998 financial performance data (return on asset and investment) and the percentage of women and minorities on boards of directors for 127 large United States companies. Correlation and regression analyses indicated that board diversity is positively associated with the financial indicators of firm performance.

Gallego, et al. (2010) examined the effect of gender diversity on corporate performance by focusing on the presence and effect of female stockholders, directors and top managers on various accounting ratios, market value and technical efficiency. The study selected Spanish corporations that were listed on the
Madrid Stock Exchange over the period 2004-2006. Panel data analysis was used. Findings show that companies with higher levels of gender diversity do not obviously outperform other companies with lower levels, in terms of several market and accounting measures.

Sener and Karaye (2014) compared board gender diversity, presence of independent directors and board size between Turkey and Nigeria. The findings indicate no statistically significant difference between the two countries in terms of board gender diversity and underrepresentation of female directors. According to the research findings, the underrepresentation of female directors is more obvious in Turkey. On the other hand, there exists statistically significant difference in terms of board size and presence of independent board members among the two countries.

Shafique, et al. (2014) examined the relationship between the board’s gender diversity and the firm’s performance particularly in the Pakistan banking sector. They measured firm performance using Return on Assets (ROA). Using a sample size of six banks over a five-year period (2008-2012), analysis was done through descriptive statistics, correlation and regression analysis. Findings of the study show that number of women on board has a significant impact on firm’s performance while percentage of women on board and presence of female CEO has no significant impact on bank’s performance.

Adusei, Akomea, and Poku (2017) investigated board and management gender diversity issues in the microfinance setting with data from 2010 to 2014. The data were drawn from 494 microfinance institutions across 76 countries. Findings from their study provided that board gender diversity is negatively and significantly related to financial performance of MFIs, management gender diversity is negatively but insignificantly related to MFI financial performance. The overall effect of their outcomes is that the push for more female representation on boards and management teams of MFIs should be done with a lot of tact and circumspection.

Mohammad, et al. (2018) explored on the effect of the percentage of women boards of directors, top and medium-level executive management positions on the financial performance of Jordanian banks. The study employed a multiple regression model on data from Jordanian banks for the period from 2009 to 2016. The findings show that, contrary to the findings of many studies from developed countries, there is no statistically significant relation between the percentages of women on boards and top and medium-level executive managements of Jordanian banks and the banks’ financial performance. Sener and Karaye (2014) only made a comparison of board gender diversity, presence of independent directors and board size between Turkey and Nigeria.

### 3.0 Methodology

The ex-post facto research design was used to conduct the study. A co-relational design is appropriate for this study because it attempts to determine the relationship that exists between the independent and dependent variables. In this case, the extent of the relationship between gender diversity and firm value are determined. The population includes all quoted deposit money banks listed on the Nigerian stock exchange as at December, 2017. In 2017, there were twenty-two deposit money banks in total listed on the Nigerian Stock Exchange (NSE, 2017). Deposit money banks are selected as the target population because limited researches have been carried out on banks and their method of presenting annual data is consistent and uniform from year to year as regulated by the Central Bank of Nigeria.

The sample size was drawn from the population using the purposive sampling technique. The sample consists of thirteen out of the twenty-two deposit money banks listed on the Nigerian Stock Exchange as at December 2017. The purposive sampling technique is appropriate because the focus is on the characteristics of the population which are of interest and the banks are selected based on the fulfillment of the criterion that such banks have all their annual reports published on their websites from 2011 to 2017 while those that do not, were completely excluded from the sample.

Quantitative method of data collection was employed for this study. All data collected were from secondary sources. The sources of the quantitative data include financial statements from annual reports of the banks as obtained from their websites covering the years 2011 to 2017. This coverage period is appropriate because it gives an insight into the banks’ performance and the changes over a period of time. The study modeled the data from selected deposit money banks listed on the Nigerian Stock Exchange as at 31st December 2017 by making use of time-series data from 2011-2017 to examine the relationship between gender diversity measured by the number of female board members and firm value measured by Tobin Q.
Table 1: Description and measurement of variables

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Variable type</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm value ($Q_{it}$)</td>
<td>Dependent variable</td>
<td>$Q = \text{Market value of firm}$</td>
</tr>
<tr>
<td>Number of female board members ($FBM_{it}$)</td>
<td>Independent variable</td>
<td>Measured as number of women on the board.</td>
</tr>
</tbody>
</table>

**Model specification**

The study’s model is specified as:

$$Q_{it} = \alpha + \beta_1 FBM_{it} + \mu_{it}$$

Where:

- $Q_{it}$ = Tobin’s $Q$
- $FBM_{it}$ = number of female board members
- $\alpha$ = constant
- $\beta_1$ = coefficient of the variable FBM
- $\mu_{it}$ = the error term
- $i = \text{number of firms} = 13$
- $t = 2011-2017 = 7$

The empirical analysis process was anchored on the regression model of the perceived functional relationship between measures of gender diversity and firm value. Numerical values of the model parameters were estimated via the Ordinary Least Squares (OLS) techniques. The regression output includes other relevant statistics that enhance further analysis and evaluation. Estimates of the model coefficients were evaluated for isolated statistical significance based on probability (P-value) and 5% level of significance. The explanatory power of the model, as a measure of goodness of fit and confirmation of overall statistical significance, is determined from the coefficient of determination (R-Square and adjusted R-Square). These statistics give an insight into the extent to which gender diversity measured by number of female board members has an influence on firm value.

**4.0 Analysis, findings and discussions**

The descriptive analysis includes the Mean, Median, Maximum, Minimum, Standard Deviation, Skewness, and Kurtosis. The characteristics of the distribution of the variables are presented in Table 2. The test statistic measures the difference of the Skewness (coefficient of symmetry) and the Kurtosis (coefficient of flatness) of the series with those from the normal distribution. Evidently, the statistic for Kurtosis shows that Firm value is Leptokurtic, which means the distribution is ‘simultaneously peaked and has fat tails’. While Female Board Members can be said to be Mesokurtic, which means the distribution is ‘peaked’. Skewness is a measure of asymmetry of the distribution of the series around its mean. The result of the skewness shows that Firm value and Female Board Members are positively skewed, implying that they have long right tails.

Descriptive statistics are conducted to state the mean differences among the variables within the observed period; and the descriptive results of these measures are reported in Table 2. The mean value of firm value is 3.9848; while the standard deviation is 13.641. As shown in Table 2, the lowest value of firm value is 0, and maximum value of 114.717, the average number of female board members is 2.6044 with a spread of 1.3734. Within 2011 to 2017, there are years where there are no female board members and the highest number of female board members so far is 6.

**Table 4.1: Descriptive analysis of the data (2011-2017)**

<table>
<thead>
<tr>
<th></th>
<th>Firm Value</th>
<th>Female Board Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>2.6044</td>
<td>3.9848</td>
</tr>
<tr>
<td>Median</td>
<td>3</td>
<td>0.7076</td>
</tr>
<tr>
<td>Mode</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Maximum</td>
<td>6</td>
<td>114.717</td>
</tr>
<tr>
<td>Minimum</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.3734</td>
<td>13.6412</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.06625</td>
<td>6.61344</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>0.01630</td>
<td>50.0895</td>
</tr>
<tr>
<td>Range</td>
<td>6</td>
<td>0.389152</td>
</tr>
<tr>
<td>Standard error</td>
<td>0.1440</td>
<td>0.823184</td>
</tr>
<tr>
<td>Sum</td>
<td>237</td>
<td>362.62</td>
</tr>
<tr>
<td>Sample variance</td>
<td>1.8862</td>
<td>186.083</td>
</tr>
<tr>
<td>Observations</td>
<td>91</td>
<td>91</td>
</tr>
</tbody>
</table>
4.2 Result of regression analysis

A positive relationship was found between number of female board members and firm value with $R = 0.072$ and $R$ squared of 0.005. This implies that only 0.5% of the variation in firm value is explained by number of female board members. The relationship though positive, is not statistically significant since the p-value of 0.4981 is greater than 0.05. As such, the alternative hypothesis, of a positive significant relationship between gender diversity and firm value is rejected. This is in line with the findings of Rose (2007). The finding however, contradicts Oba and Fodio (2013) who observed a positive significant relationship between female gender board composition and financial performance. Oba and Fodio adopted the return on capital employed as a measure of financial performance while controlling for board size.

Table 4.2: Regression result

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>P-value</th>
<th>R</th>
<th>R-Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBM</td>
<td>0.7143</td>
<td>1.0501</td>
<td>0.6802</td>
<td>0.4981</td>
<td>0.072</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Researchers’ compilation from E-view Output (2018)

5.0 Conclusion and recommendation

The goal of this study was to examine the impact of gender diversity measured by number of female board members on firm value. The presumption was that gender is vital for the financial success of firms as established in literature. The findings of this study show that the number of female directors on a board has a positive but insignificant impact on the banks’ performance. This indicates that the number of female directors on a board is associated with increased firm value of deposit money banks in Nigeria. However, the impact is non-significant. The study therefore, recommends that Nigerian deposit money banks should tacitly increase the small percentages of women currently on their boards owing to the findings from this study.

References


Abstract
The study sought to examine the level of students’ knowledge in the use of cell phone in Anchor University Ayobo Lagos. The third and second year students of the university were selected as the population of the study. Questionnaires were used to elicit information from a census of 140 undergraduate students of the University. One hundred and forty (140) copies of the questionnaires were administered out of which one hundred and twenty nine (129) copies valid questionnaires were retrieved, given a rate of 92%. In achieving the objective of the study, the data was analyzed using descriptive statistics. The result revealed that 94(73%) respondents browse the internet; 81(63%) respondents accessed lectures from Lecturers online; 94(73%) respondents downloaded journal articles for carrying out assignment; 70(54%) respondents participated in Google class with Lecturers and their class mates. It was found out that university students considered the possession of android cell-phones as symbols of culture and inclusion status; the knowledge of the computer and internet have enabled the students to connect to the World Wide Web (www) through the use of their cell-phone, to download articles and documents for their academic purposes, which produced positive effect on their learning. It is recommended that the University authorities should expose their students on how they can use their cell-phone to carry out other intelligent operations, collaborate with students from other Universities to work on academic research and other projects.

Keywords: Students cell-phone usage, culture, information communication technology (ICT), the internet, digital culture.

1. Introduction
Culture generally refers to the beliefs and values that are held by a set of people. Culture can be assumed as the systems, beliefs and values of a set of individuals, adults or youths (students) in an organisation or an organized society, such as the University set up, to which they are strongly committed to (Greenberg & Baron, 1995; Kreitner & Kinncki, 2004). Culture refers to the fundamental core values that are upheld in a society (Robbins & Judge, 2013). The values that are prevalent in a society are upheld by the members of that society and these values play a pivotal role in shaping the culture of that society. Values are standards and attitudes which people apply in making choices (Ejiogu, 1995).

The evolution of the internet is referred to by Naughton (2016) as the general purpose science, and that ICT have quickened the process of students learning. Ogunyemi (2010); Ahmed, Qazi, and Perji, (2011) inferred that digital culture has impacted the lives of university students through their android powered cell-phone usage behaviour.

1.1 Statement of the Problem
The problem of cell-phone as a symbol of culture, inclusion status is evolving among students cell-phone users today. The researcher is also faced with the problem of the relevancy in adopting the Uses and Gratifications Theory (U&G) to identify the satisfaction derived from the use of the brand of the cell-phone possessed by students. Another problem is the determination of the effect of computer and the internet on students’ cell-phone usage; the effect of the usage of cell-phones on University students and their learning. The study sought to proffer solutions to these problems.

1.2 Objective of the Study
The objective of the study are to (i) find out the influence of cell-phone usage as a culture on university students (ii) to determine whether students derive gratifications from the use of the android cell-phone they possessed (iii) find out the effect that the knowledge of the computer has on students ability to carry out operations with android cellphone (iv) find out the effect that the knowledge of the internet has on students ability to carry out operations with android cellphone (v) identify the effect of android cell-phone usage on students (vi) identify the effect of android cell-phone usage on students learning.

1.3 Research Questions
The study would proffer answers to the following questions: (i) Do you consider your possession and the use of android cellphone as a culture? (ii) What gratifications do you derive from the use of your android
cellphone? (iii) Do you believe that the knowledge of the computer has effect on students’ ability to carry out operations with android cellphone? (iv) Do you believe that the knowledge of the internet has effect on students’ ability to carry out operations with android cellphone? (v) What are the effects of android cellphone usage on students? (vi) What are the effects of android cellphone usage on students learning?

2. Literature Review

University Students Cell-phone Usage Behaviour

University students over the years have developed different behavior that shaped their learning culture and their cell-phone usage. Matoskova, Bilikova and Dobes (2015) in their study identified motivation, intelligence, industriousness, pro-activity as qualities of university students that will endear them success in their academics. Cell phones possess range of new possibilities and advantages for students’ learning, communication, social interaction and networking (Ezemenaka, 2013; Adebayo, 2015; Nasrullah& Khan, 2015).

Cell-phone usage creates positive impact on the process of students learning, it creates appreciable good effect on students’ performance(Kahari, 2013; Lepp, Barkley &Karpinski, 2015 Clayton & Kim, 2018).Digital technologies are now prevalent for use in our society and the university environment (Watulak, 2010). In the opinion of Youssef & Dahmani, (2008); Ahmed et al, (2011); Jan, Ullah, Alli, & Khan, (2015) and Kushwaha (2017) the increasing use of the cell-phone produced good influence on students awareness of the emerging scenario in the global digital academic, culture and socio-economic space.

In spite of the benefits of cell-phone, it is becoming a negative rather than a positive tool of influence on students’ morals, ethics and the proper use of their time for profitable academic pursuit (McCoy, 2013). Ogunyemi (2010) in his study found out that cell-phone usage is an element of distraction to students. To concretize this statement, Ogunyemi (2010) cites Debaillon and Rockwell (2005) who found out that cell-phone usage can interrupt driving, work, meetings, meals, and other conversations.

Culture Concept and Students Cell-phone Usage

Culture is the combinations of values, customs, norms, traditions, attitudes, pattern of behaviour by individuals in a society on the ways of doing things (Armstrong, 2009). The pattern of dispositions are largely due to what the society has been doing before and how successful it was doing it; this leads us to the ultimate source of a society culture referred to as the founders or the early initiators of the culture (Schein, 1983). Culture makes the members of a given society to foster good interpersonal relationship (Hellriegel, Slocum & Woodman, 1998; Deuze, 2007; Robbins & Judge, 2013).

Culture consists of values and norms. Values are believed to be what are important about how people behave and what is best or good for the society (Kreitner & Kinicki, 2004; Armstrong, 2009). On norms Armstrong (2009) explains that norms are written or unwritten rules of guidelines for behaviour in a given set up or society (Hackman, 1992). A visit to any University Campus in Nigeria will attest to the contemporary norms among university students, which is the possession and the use of android cell-phone everywhere and all the times in the university campus. The students demonstrate their cell-phone as part of their dressing outfit. Some of the students may insert their cell-phone in their pockets or bags, some may hold their cell-phone in their hands, but one culture is common among the students, they all insert their earpiece on for listening to music or making and receiving calls.

Information Communication Technology (ICT) and Students Cell-phone Usage

ICT and its e-technologies by-products, especially the computers, have impacted on the process of students learning. Students who made use of ICT-based instruction scored higher than students who do not (Kulik, 1994). ICT usage according to Youssef and Dahmani (2008) in the higher institutions has substantial effect on students’ process of learning. ICT usage comes with the added new possibilities for students’ performance, achievement in their areas of study and in distance education anywhere and anytime (Kabir & Kadage, 2017).

Internet and Students Cell-phone Usage

Internet-driven digital culture is greatly accelerated by the popularity of networked computers, personalized technologies and digital images (Cohen-Almagor, 2011, Naughton, 2016& Zimmermann, 2017). Ruggiero (2000) and Naughton (2016) state that the internet has grown into science and technology tool in the 21st century that is impacting on every sphere of human life. According to internet growth statistics (internetworldstats.com), the total users of the internet in the world has grown geometrically from 16 million (0.4%) of the world population in December 1995 to 4 billion 383 million (56.8%) of the world population as at 31st March, 2019.

The internet exert both positive and negative influence with various consequences on industries, economies
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and communities, resulting into ‘creative destruction’ in this information and digital technology age (Schumpeter, 1934, 1942; Abbate, 1999 & Naughton, 2016). It is the belief of Floridi (2009, 2010) and Cohen-Almagor (2011) that humanity must reinforce her conceptual understanding of the impact of the contemporary information age - the internet - on the environment.

The relevance of the scientific scenario that led to the development of the internet to this study, is that, university students should make use of the advantages of the changes which science and technologies are offering, in order to be able to excel in their discipline and to also be able to contribute their quantum to the shifting forward of the frontier of knowledge.

**Digital Culture and Students Cell-phone Usage**

According to Sula and Hill (2017), the origin of digital humanities (DH) is traceable to the era of digital computing in the middle of the 20th century. Presner (2010); Dalbello (2011); and Fish (2012) are of the opinion that the early work on DH concentrated mainly on text analysis, such as classification systems, mark-up, text coding and scholarly editing. There seems to be a consensus between the research findings of Dalbello (2011); Gold (2012); Terras, Nyhan and Vanhoutte (2013) on their identification of DH advancing into Humanities Computing (HC) through the launching of the Journal Computers and the Humanities (CHum) in 1966.

Hockey (2004); Jockers and Worthey (2011) accentuate to the fact that the period of DH encompasses digital achieves and databases to Geography Information Science (GIS), network analysis, new publishing formats, digital pedagogy. Dascal (2006) and Uzelac (2010) viewed digital advances as having led to the increase interactions between digital technologies (such as ICT and the Internet) and the world of culture and social system which is now referred to as Digital Culture.

**Conceptual Framework**

The study is on digital culture and cell-phone usage behaviour among students of Anchor University Lagos, Nigeria. The conceptual framework of the relationships among the variables in the study is articulated in Figure 1:

![Conceptual Framework](image)

**Figure 1: Conceptual Framework**

**Source of Variables adapted for the Conceptual Framework are:**

- Kreitner and Kinicki, (2004); Sula and Hill (2017) - Culture and Digital Culture
- Youssef and Dahmani (2008) - Information Communication Technology (ICT)
- Cohen-Almagor (2011); Naughton (2016) - The Internet
- Kahari (2013); North, Johnston and Ophoff (2014); Kushwaha (2017) –University Students Cell-phone Usage Behaviour

**Theoretical Review**
Wimmer and Dominic (1994), state that the Uses and Gratification theory (U&G) evolved in the 1940s. The (U&G) theory describes why consumers use a particular medium and what gratifications they derive (Katz, Blumler&Gurevitch, 1974; McQuail, 1994; Ruggiero, 2000; Karimu, Khodabandelou, Ehsani and Ahmad, 2014). The U&G theory is relevant to this study because students who are cell-phones users have in mind the gratifications they are expecting from its performance (LaRose, Mastro & Eastin, 2001; LaRose & Eastin, 2004; and Flanagin, 2005). If the students derived the performance they expected from the use of their android cell-phone, their gratifications are met. On the other hand, if the students did not derive the performance they expected from the use of their android cell-phone, their gratifications are not met. Therefore the underpinning of the study is the (U&G) theory.

3. Methodology
The study employed quantitative design. The quantitative design follows the practice of Kahari (2013) Akanferi, Aziale and Asampana (2014) and North, Johnson and Ophoff (2014). All the third and second year students of Anchor University Ayobo Lagos were selected as the study population. About 50 third year students of the Faculty of Science and Science Education (FSSE), who were on Students Industrial Work of Experience (SIWES) in May 2019 at various organisations, during the period of the study, were not present in the University and were therefore excluded from the administration of the questionnaire.

Questionnaires were used to elicit information from a census of 140 undergraduate students of the University consisting male and female. One hundred and forty (140) copies of the questionnaires were administered, out of which one hundred and twenty nine (129) copies valid questionnaires were retrieved; therefore the study was based on 129 questionnaire that were returned, this gave a response rate of 92%. The sample subjects were 2016/2017 and 2017/2018 full time male and female third and second year students who were undergoing full time undergraduate courses in the University as at the time of the study. The third year 2016/2017 Anchor University students were 102 based on the 1st Matriculation Programme Ceremony on Wednesday 22nd March, 2017; the second year 2017/2018 students were 114 based on the 2nd Matriculation Programme Ceremony on Saturday 3rd March 2018. The third and second year Anchor University students were 216.

4. Analysis of Data and Results
Data was analyzed using descriptive statistics. Data presentation, interpretation and analysis are as follows:

Data Presentation of Respondents Demographic Information

<table>
<thead>
<tr>
<th>Composition</th>
<th>Frequency</th>
<th>Percentage</th>
<th>Cumulative Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>51</td>
<td>39.5</td>
<td>39.5</td>
</tr>
<tr>
<td>Female</td>
<td>78</td>
<td>60.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) 16 – 20 Years</td>
<td>102</td>
<td>79.0</td>
<td>79.0</td>
</tr>
<tr>
<td>(b) 21 – 26 Years</td>
<td>27</td>
<td>21.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Faculties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(a) Faculty of Humanities</td>
<td>16</td>
<td>12.4</td>
<td>12.4</td>
</tr>
<tr>
<td>(b) Faculty of Social and Management Sciences</td>
<td>75</td>
<td>58.1</td>
<td>70.5</td>
</tr>
<tr>
<td>(c) Faculty of Science and Science Education</td>
<td>38</td>
<td>29.5</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Level</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>200 Level</td>
<td>97</td>
<td>76.0</td>
<td>76.0</td>
</tr>
<tr>
<td>300 Level</td>
<td>32</td>
<td>24.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Field survey (2019)
4.1 Data Analysis of Respondents
Demographic Information (Sex and Age Compositions)

Data Analysis of Respondents Sex Composition
Analysis from Table 4.1 reveals that the number of male is 51 (39.5%) while that of female is 78 (60.5%). It can be assumed that there are more female students than male in the Institution where the study is domiciled.

Data Analysis of Respondents Age Composition
Analysis from Table 4.1 reveals that the number of the respondents within the age bracket (16 to 20 years) is 102 (79%), while that of the respondents who are in the age bracket (21 to 26 years) is 27 (21%). This information reveals that students within the age bracket (16 to 20 years) are more than students within the age bracket (21 to 26 years) in the sampled Institution.

4.2 Analysis of response to questions in the questionnaire

Question: What operations do you carry out with your android cellphone?
In answer to this question, the operations carried out by the respondents are shown in Table 4.2

<table>
<thead>
<tr>
<th>S/ N</th>
<th>OPERATIONS CARRIED OUT</th>
<th>FREQUENCY (YES)</th>
<th>FREQUENCY (NO)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Making and receiving calls</td>
<td>129(100%)</td>
<td>NIL</td>
</tr>
<tr>
<td>2</td>
<td>Sending and receiving text messages</td>
<td>129(100%)</td>
<td>NIL</td>
</tr>
<tr>
<td>3</td>
<td>Receiving and sending email</td>
<td>129(100%)</td>
<td>NIL</td>
</tr>
<tr>
<td>4</td>
<td>Accessing lectures from Lecturers on-line</td>
<td>81(63%)</td>
<td>48(37%)</td>
</tr>
<tr>
<td>5</td>
<td>Downloading journal articles for carrying out assignment</td>
<td>94(73%)</td>
<td>35(27%)</td>
</tr>
<tr>
<td>6</td>
<td>Participating in Google class with Lecturers and class mates</td>
<td>70(54%)</td>
<td>59(46%)</td>
</tr>
<tr>
<td>7</td>
<td>Chatting on WhatsApp and Facebook</td>
<td>123(95%)</td>
<td>6(5%)</td>
</tr>
<tr>
<td>8</td>
<td>Listening to music, playing games and Watching of video film</td>
<td>119(92%)</td>
<td>17(8%)</td>
</tr>
<tr>
<td>9</td>
<td>Programming, compiling and coding</td>
<td>21(16%)</td>
<td>108(84%)</td>
</tr>
<tr>
<td>10</td>
<td>Creating web sites</td>
<td>21(16%)</td>
<td>108(84%)</td>
</tr>
<tr>
<td>11</td>
<td>Receiving money from and sending money to people</td>
<td>100(78%)</td>
<td>29(22%)</td>
</tr>
<tr>
<td>12</td>
<td>Digital marketing (selling and buying of goods on-line)</td>
<td>85(66%)</td>
<td>44(34%)</td>
</tr>
</tbody>
</table>

Source: Field survey (2019)

On the three operations that have direct effect on students learning on Table 4.2: 81(63%) respondents accessed lectures from Lecturers on-line, while 48(37%) do not; 94(73%) respondents downloaded journal articles for carrying out assignment, while 35(27%) do not; 70(54%) respondents participated in Google class with Lecturers and class mates, while 59(46) do not.

Analysis of the Relationship among Study Variables based on Research Questions

(i) Do you consider your possession and use of android cellphone as a culture?
In answer to this question 119(92%) respondents said that they considered the possession and the use of their android cellphone as a culture, while 10(8%) responded that they do not consider the possession and the use of their android cellphone as a culture

(ii) What gratification do you derive from the use of your android cellphone?
In answer to this question 97(75%) respondents stated that they derived the following gratifications from the use of their android cellphones: (i) durability and good quality (ii) long lasting battery life (iii) bright screen (iv) clear camera (v) front and back camera (vi) clear picture (vii) good sound (viii) large storage capacity and (ix) fastness in browsing, while 32(25%) respondents did not state the gratification they derive from the use of their android cellphones.

(iii) Do you believe that the knowledge of the computer has effect on students’ ability to carry out operations with android cellphone?
In answer to this question 109(84%) respondents stated that the knowledge of computer had effect on their ability to carry out operations with their android cellphones, while 20(16%) respondents stated that
the knowledge of the computer has no effect on their ability to carry out operations with their android cellphones.

(iv) Do you believe that the knowledge of the internet has effect on students’ ability to carry out operations with android cellphone?

In answer to this question 112(87%) respondents stated that the knowledge of the internet had effect on their ability to carry out operations with their android cellphones, while 17(13%) respondents stated that the knowledge of the internet has no effect on their ability to carry out operations with their android cellphones.

(v) What are the effects of android cell-phone usage on students?

In answer to this question 48(37%) respondents stated that the positive effect of android cell-phone usage on students facilitates the carrying out of research; 70(54%) respondents stated that the negative effect is that it distracts students from concentrating on their studies, make them addicted to its use which can affect their health and make them waste their time, while 11(9%) did not state any effect of android cell-phone usage on students.

(vi) What are the effects of android cell-phone usage on students learning?

In answer to this question 75(58%) respondents stated that android cell-phone usage helps students to access information on-line for carrying out their assignments, 34(26%) respondents stated that it helps students to access and read lecture notes on-line, while 20(16%) respondents did not state the effect of android cell-phone usage on students learning.

Discussion of Findings

On the three operations that have direct effect on students learning: 81(63%) respondents accessed lectures from Lecturers on-line; 94(73%) respondents downloaded journal articles for carrying out assignment; 70(54%) respondents participated in Google class with Lecturers and their class mates. The study therefore revealed that substantial numbers of the students carried out operations that have positive effect on their learning. On the question on culture, 119(92%) respondents considered the possession and the use of their android cellphone as a culture. In answer to the question on the effect of android cell-phone usage on students, 70(54%) respondents stated that the negative effect is that it distracts students from concentrating on their studies, make them addicted to its use which can affect their health. In answer to the question on the effect of android cell-phone usage on students learning, 75(58%) respondents stated that it enabled students to access information on-line for carrying out their assignments, 34(26%) respondents stated that it helps them to access and read lecture notes on-line.

Debaillon and Rockwell (2005); and Ogunyemi (2010) found out that cell-phone is a tool that distracts students from adhering to their important itineraries. Goswani and Singh (2016) found out that cell-phone is becoming a negative rather than a positive tool of influence on students’ morals, ethics and the proper use of their time for learning. In the work of Gowthami and Kumar (2017) they found out that excessive or prolonged usage of android cellphones by students may result into serious health issues, that affect their mental perception. In the study of Ahmed et al, (2011), they found out that cell-phone is a necessity to youngsters today. Students accessing the internet through their cell-phones add values to their learning, academics, and their role in everyday life (Kahari, 2013). In the studies of North, Johnston and Ophoff (2014); Kushwaha (2017) and Kabir and Kadage (2017) on the digital culture of cell phone usage among University students, they found out positive effect on students study habits and that it is an important tool for accessing useful educational materials for online learning.

5. Conclusion and Recommendation

It was found out that university students considered the possession of android cell-phones as symbols of culture and inclusion status. The knowledge of the computer and internet have enabled the students to connect to the World Wide Web (www), through the use of their cell-phone, to download articles and documents for their academic purposes, which produced positive effect on their learning and good influence on their awareness of the emerging scenario in the global digital academic culture and communication. In the opinion of Goswani and Singh (2016) cell-phone is becoming a negative rather than a positive tool of influence on students learning. Gowthami and Kumar (2017) found out that excessive or prolonged usage of android cellphones by students may result into serious health issues that affect their mental perception. However in the study of Ahmed et al, (2011), they found out that cell-phone is a necessity to youngsters today. According to Kahari (2013); North, Johnston and Ophoff (2014); Kushwaha (2017) and Kabir and Kadage (2017), the digital culture of cell-phones usage by students add values to their learning, create positive effect on students study habits and that it is an important tool for accessing useful educational materials for online learning.
**Recommendations**

It is recommended that:
1. University authorities and the parents/guardians should educate students against excessive or prolonged usage of android cell-phone, in order to avoid serious health issues such as addiction and negative effects on their stress levels that may affect their mental perception.
2. Students should not make use of their cell-phones when they are driving.
3. Students should be conscious of the distracting influence and time wasting nature that uncontrolled usage of android cell-phone can cause to them.
4. The University authorities should teach their students on how they can with their cell-phone carry out other intelligent operations and collaborate with students from other Universities to work on academic research and other projects.

**Limitation and Future Study Focus**

The population and sample size adopted are the limitations for this study, this is because of the paucity of fund available to the researcher; therefore future study can focus on larger population and sample size.

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EFFECT OF POLITICAL AND ECONOMIC RISK ON NIGERIAN TOURISM INDUSTRY

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Abstract
Nigeria, the most populous black nation is blessed with great cultural, historical, natural, beautiful and tourist attractions such as waterfalls, water springs, temperate climate, historical highlands and places, and diverse rich cultural heritage. With the availability of these tourism assets, tourism is still striving to develop in the country. The study aims to determine the extent to which political and economic risks has affected tourism industry in Nigeria. Using the ordinary least square statistical technique to examine the relationship between political and economic risk and tourism in Nigeria specifically between 2006 and 2017, the study adopted a regression approach and found out that political and economic risk has significant effect on tourism and tourism have a significant impact on economy. The significant effect of political and economic risk on tourism calls for adequate security in the country, better legal and institutional framework. This will enhance the economic impact of tourism on the Nigerian economy.

Keywords- Economic Risk, Political Risk, Tourism Industry, Gross Domestic Product (GDP)

1. Introduction
The changes experienced in Nigerian politics and economy have significantly affected the general performance of the economy. Ismaila and Imoughele (2015) posit that Nigerian economic performance since independence has been unimpressive and this is as a result of the political and economic terrain. The change in legal and institutional framework, dynamics of government ideology, insurgency, religion and ethnic unrest and economic policies all play significant roles in the performance of different sectors of the economy. Erumegbe (2015) argues that the political and economic environment and the risk associated with them provide both opportunities and threats to businesses. Hall (1994) concludes that political risk includes impact of terrorism, coups and revolutions which have effect on businesses and tourist industry.

Nigeria, the most populous black nation is blessed with great cultural, historical, natural, beautiful and tourist attractions such as waterfalls, water springs, temperate climate, historical highlands and places, and diverse rich cultural heritage. Bankole (2002) noted that Nigeria is a potential tourist paradise which boasts of historical relics, culturally active people, variety of wildlife, captivating, great weather (semi-temperate, harmattan and humid weather) in different parts of the country, beautiful vegetation and awe-inspiring waterfalls).

According to Taylor (1973), places which count for great tourist destinations are distinctly characterized by Sunshine, Springs, Climate and Sand Beaches. Despite all these great tourist features in Nigeria, the Nigerian tourism industry has not blown to it full potentials thereby limiting the benefits such as creation of employment, increase in foreign exchange revenue and economic developments to be derived from it. Adora (2010) argues that one of the important features of the tourism industry is labour insensitiveness which create tremendous opportunities for employment, foreign exchange earnings, and income generation. Ayeni, Ebohon, and Taki (2009) concluded that the Nigeria tourism industry is plagued with numerous problems which include inadequate, or supporting institutions and framework coupled with lack of infrastructures. In recent times, there has been a clamour for the development of Nigerian tourism industry but such has been beset by the spate of religion intolerance, insurgency, and change in government among others. There seems to be dart of literature and empirical evidences to show the extent at which political risk has influenced tourism in Nigeria.

Objective of the Study
i. To examine what constitute political and economic risk
ii. To determine the extent to which political and economic risk affects tourism industry in Nigeria
iii. To examine the effect of tourism on gross domestic product.

Research Questions
i. To what extent has political and economic risk affected tourism industry in Nigeria?
ii. To what extent does tourism affect economy performance?
Research Hypothesis
Ho1: Political and Economic Risk significantly affect Tourism
Ho2: Tourism significantly affects economic performance.

2. Literature Review

Concept of Political and Economic Risk

There is no clear concept as to the exact definition of political and economic risk. Poirier (1997) noted that the boundaries between economic and political risk cannot be determined precisely and that both political and economic risk are considered in the concept of Political Risk Analysis (PRA). This is so because both political and economic risk are spontaneous events that take place within a specific environment which both create threats and opportunities for the survival of businesses. LaPalombara and Blank (1977) concluded that political and economic risks are threat of nationalization, expropriation, indigenization coupled with bureaucratic policies, terrorism, violence, weaknesses and vulnerability of government to the existence of businesses in a country.

According to Poirier (1997), PRA are economic policies made by government which are subject to both local and international politics, and this can work against tourism industry. Political and economic risk are those factors which create threats and opportunities to the existence of businesses.

Sotilotta (2013) is of the opinion that political and economic risks are the changes in the politics and economics in the environment which a business exist and these changes are difficult to anticipate, and which significantly affects the performance of an enterprise. This study therefore, view political and economic risks as those factors which are unpredictable and inherent in a particular area or country which affects the performance or existence of an activity or enterprise. Political and economic risks are those external and internal uncontrollable factors which occurrence and existence affects or promote business activities. According to Economic intelligence unit (EIU, 2017) the presence of twelve variables which are internal conflict, investment profile, social economic conditions, corruption, religious tension, external conflict, government instability, democratic accountability, military in politics, ethnic tension, law and order and bureaucracy signify the presence of political and economic risk.

These factors are grouped into two types. Ebru (2015) established that Political and Economic risk primarily are in two forms which are local and regional risk, and global risk. The local and regional risks are specific to a country while the global risk are political and economic threats and opportunities influenced by global happenings which affect nations of the world. Mawanza (2015) noted that there are micro and macro risks. The micro risks are both firm and country specific while the macro risks are country and global specific. According to World Bank (2018), PRA involves firm specific, country specific and global specific.

Nigerian Tourism Industry

According to Bankole (2002), Nigerian tourism industry has grown in leaps and bounds but not yet as vibrant as that of South Africa and other emerging economies. The tourism industry has contributed to the Nigerian economy at both micro and macro level. The micro level of contribution involves direct and indirect effect of tourism. Tourism has a direct impact on accommodations (hotels, guest house, chalets among others), food and beverages (relaxation centers, restaurants, and eateries), entertainment (night clubs and tours), transportation (car rentals, yatch, airplanes and boats)and shopping subsector while the indirect impact are on the telecommunication, airport and road infrastructures, wholesaler, services provider, and manufacturer. The macro effect tourism has on the Nigerian economy can be felt in terms of the employment created, revenue generated and foreign exchange earned from the sector. The Nigerian Bureau of Statistics (NBS, 2018) noted that Accommodation, and Food and Beverages sector contributed about 0.45% to the Gross Domestic Product (GDP) as at 2012. Ekundayo (2014) posits that Nigerian tourism industry has the potentials of diversifying the economy from being dependent on crude oil alone.

The World Tourism and Trade Council (WTTC, 2015) established that the impact of tourism on the Nigerian economy can be felt from three points of view which are direct, indirect and induced. The direct impact includes commodities (accommodation, entertainment, transportation, entertainment, and attraction), industries (accommodation services, transport services, sport and cultural services, and rental services) and sources of spending (visitor export, resident spending, business travel spending and government spending). The indirect impact includes tourism and travel investment spending, government tourism and travel spending and effect on purchases from supplier while the induced impact is as a result of spending of employees in the tourism sector.
Direct Impact
According to the United Nations Statistical Division, Recommended Methodological Framework (UNSD, RMF) 2015, the direct impact of Travel & Tourism to GDP reflects the internal spending on Travel & Tourism (total spending within a particular country on Travel & Tourism by residents and non-residents for business and leisure purposes) as well as government individual spending - spending by government on Travel & Tourism services directly linked to visitors, such as cultural (museums) or recreational (National parks).

The direct contribution of Travel & Tourism to GDP is calculated to be consistent with the output, as expressed in National Accounting, of tourism-characteristic sectors such as hotels, airlines, airports, travel agents and leisure and recreation services that deal directly with tourists. The direct contribution of Travel & Tourism to GDP is calculated from total internal spending by ‘netting out’ the purchases made by the different tourism industries.

Indirect Impact
The RMF (2008) shows that the indirect impact of tourism includes the GDP and jobs supported by: Travel & Tourism investment spending which is an important aspect of both current and future activity that comprises investment activity such as the purchase of new aircraft and construction of new hotels; Government collective spending, which helps Travel & Tourism activity in many different ways as it is made on behalf of the macro economy. For example, tourism marketing and promotion, aviation, administration, security services, resort area security services, resort area and sanitation services among others; Domestic purchases of goods and services by the sectors dealing directly with tourists - including, for example, purchases of food and cleaning services by hotels, of fuel and catering services by airlines, and IT services by travel agents.

Induced Impact
The induced contribution measures the GDP and jobs supported by the spending of those who are directly or indirectly employed by the Travel & Tourism sector. The WTTC (2016) noted that the Nigerian tourism sector contributed about 4.1% to the Nigerian GDP in 2014 and 4.0% in 2015. Total employment created by tourism industry is about 3.6% of the total jobs in Nigeria while the total investment on tourism is 6.6% of the total value of investment in the country.

Empirical Literature
Neacsu, Viasceanu and Negut (2018) investigated the new context of contemporary tourism within developing geographical risk and concluded that political and economic is influenced by geopolitics and this has significant impact on tourism of each country.

Ruan, Li and Liu (2017) developed and established an integrated model in explaining the association between the benefits of tourism and the destination image. The study revealed that manmade disasters have impact on tourism and that there is an overwhelming effect of feeling experience on destination imagine.

Ebru (2015) examined the impact of political and economic uncertainties on tourism industry in Turkey, utilizing a case study approach. The study identified global crises, political instabilities between European Union and Russia and, domestic and regional political instabilities as types of uncertainties affecting tourism in Turkey. The study also revealed that tourism in Turkey is indirectly affected by economic crises in Russia based on the number of tourist arrivals and statistics on tourist flow.

Ekundayo (2014) did a research on strategic development and sustainability of tourism industry in Nigeria based on theoretical and empirical point of view. Interview, survey, and existing literature are the sources of the data used in the study. Based on the result obtained from the research, it was revealed that there is hope for Nigeria’s Tourism industry. Besides that, the research also outlined the dangers of instability and government negligence on the matter concerning the development of tourism and also the benefits of encouraging, financing and supporting the tourism activities in Nigeria. It is indeed advisable to note that the tourism industry is part of the developmental factors of any nation who takes its tourism industry very seriously.

Bankole (2002) did a study on Nigerian tourism sector, economic contribution, and constraint and concluded that international policies such as the General Agreement on Tariffs and Trade, domestic market reforms, and policies, and recapitulation of the tourism are needed for a buoyant and vibrant tourism industry.

Dolnicar (2007) examined crises that scare tourists: investigating tourists travel related concern, related the term uncertainty to the intangible nature of the tourism product and associates the term with risk and perceived risk by tourists in their choice processes. The study concluded that risk is a vital factor in
considering tourism type and destination. Similarly, Fletcher and Morakabati (2008) analyze the effects of terrorism and political instability on the level of tourism activity and associate uncertainty with personal safety and security as well as risk perception. Floyd, Gibson, Pennington and Thapa (2004) investigated the effect of risk perceptions and intentions to travel in the aftermath of September 2011, in the United States of America, and revealed the relationship between perceived risk and travel intentions and identify risks as financial risk, health risk, physical risk, crime risk, terrorism risk, social risk, psychological risk and risk of natural disasters and concluded that these types of risk have significant impact on tourism.

Steiner (2010) investigated the impacts of political risk and violent political unrest on tourism Foreign Direct Investment (FDI) in the Middle East and identified international non-violent government interference as economic sanctions, foreign trade embargos, blockades and travel restrictions political and economic risk. The study also distinctively characterized political unrest as being related to political risk, which is differentiated from political instability.

Conceptual Framework
The model shows the linkage between political and economic risk, tourism and economy. It shows how these variables are interrelated.

**Figure 1**

Source: Authors (2019)

3. **Methodology**

The ordinary least square statistical technique is used to examine the relationship between political and economic risk and tourism in Nigeria specifically between 2006 and 2017. Time series secondary data from the World Travel and Tourism Council, 2017 were used in the regression analysis. The source was validated and is proved reliable for data on macroeconomic variables. The estimation technique is feasible in terms of data requirements and less demanding as it focuses on a relatively small set of aggregate variables instead of requiring a full specification of all the explanatory variables. It is an appropriate form of research design for ascertaining the effects of independent variables on the dependent. The hypotheses are:

H₁: Political and economic risk affects tourism. And H₂: Tourism significantly affects economy performance. The decision rule is of the following form: Reject Ho if p > 0.05

**Model Specification**

Hypothesis 1.

\[ TOU = \beta_0 + \beta_1 \text{EXCHR}_{t} + \beta_2 \text{GDP}_{t} + \beta_3 \text{PSA}_{t} + \beta_4 \text{ROL}_{t} + \beta_5 \text{RQ}_{t} + \mu \]

TOU: Tourism
EXCHR: Exchange Rate
PSA: Political Stability and Absence of Terrorism
GDP: Gross Domestic Product
RQ: Regulatory Quality
ROL: Rule of Law
INFL: Inflation Rate
\( \mu \): Error Term
Hypothesis II
GDP= B1+ β1TOU+ β2EMPL+ β3INVE+ μ
GDP: Gross Domestic Product
TOU: Total value of Tourism
INVE: investment in Tourism
EMPL: Employment value in Tourism Sector
μ: Error Term

4. Result and Discussion

Descriptive statistics
This shows the analysis of mean standard deviation reveals that the data point is close to the expected value (mean). It reveals that rule of law (2.221) is closest in explaining tourism and it has the highest value in the model.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>St. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourism</td>
<td>1.897</td>
<td>1.377</td>
</tr>
<tr>
<td>Regulatory Quality</td>
<td>1.716</td>
<td>1.312</td>
</tr>
<tr>
<td>Gross domestic product</td>
<td>1.824</td>
<td>1.278</td>
</tr>
<tr>
<td>Rule of law</td>
<td>2.221</td>
<td>1.381</td>
</tr>
<tr>
<td>Exchange Rate</td>
<td>2.142</td>
<td>1.454</td>
</tr>
</tbody>
</table>

Test of Hypothesis
In analyzing the H1, the study employed five variables in measuring political and economic risk. The independent variables are: Exchange rate, rule of law, gross domestic product, regulatory quality and inflation rate. These variables fall within the measures of political and economic risks as defined by the Economic Intelligence Units (EIU, 2017). The dependent variable is data tourism which is measured by the total number of tourists into the country.

Ho1: There is Political and Economic Risk significantly affects Tourism

Table 1: Model Summary

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>R</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>.949a</td>
<td>.901</td>
<td>.802</td>
<td></td>
<td>1.97182</td>
</tr>
<tr>
<td>F-stat</td>
<td>(p=0.15)</td>
<td>9.091</td>
<td>.901</td>
<td>.802</td>
<td></td>
<td>1.97182</td>
</tr>
<tr>
<td>DW</td>
<td>1.24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result of the analysis shows that there is a 94.9 % relationship between political and economic risk analysis and tourism industry. The coefficient of determination which is adjusted R² shows that 80.2% variation in tourism industry is caused by political and economic risk.

The test of significance at 5 % confidence interval shows that the model is a good fit and that the null hypothesis be rejected while the Alternative be accepted. The F-Stat is significant at 0.05 (5 %) interval level (P=0.015<0.05). And this shows that the model is a good fit, thereby rejecting the null hypothesis and accepting the alternative hypothesis.

Coefficients:
The coefficient table shows the contribution of each variable to the model. It reveals the significance of exchange rate, inflation, political stability, rule of law and regulatory quality variable to tourism.

Table 2: Coefficients

<table>
<thead>
<tr>
<th>Table 2: Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>T</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>B</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>19.264</td>
<td>13.566</td>
<td>-6.80</td>
<td>1.420</td>
<td>.215</td>
</tr>
<tr>
<td>EXCHR</td>
<td>-.144</td>
<td>.046</td>
<td>-.023</td>
<td>-3.149</td>
<td>.054</td>
</tr>
<tr>
<td>INFL</td>
<td>-.030</td>
<td>.329</td>
<td>-.0981</td>
<td>0.31</td>
<td></td>
</tr>
<tr>
<td>PSA</td>
<td>3.116</td>
<td>.671</td>
<td>.785</td>
<td>4.647</td>
<td>.006</td>
</tr>
</tbody>
</table>
The result also shows that inflation rate, rule of law and Exchange rate analysis have inverse impact on tourism. That is, Inflation ($\beta = -0.023$, $t = -0.91$, $P = 0.31$), Rule of Law ($\beta = -0.094$, $t = -0.42$), Exchange Rate ($\beta = -0.680$, $t = -3.149$, $P = 0.025$). The result reveals that there is an inverse relationship between inflation, rule of law and Exchange rate and tourism. That is, as inflation, rule of law and exchange rate increases, tourism reduces, and as these variables reduce in effect, tourism increases. Political stability and Regulatory Quality have direct effect on tourism. As these indicates that as Political Stability ($\beta = -3.116$, $t = 4.647$, $P = 0.06$), and Regulatory Quality ($\beta = -0.421$, $t = 1.175$, $P = 0.03$), increases, Tourism increases this indicates that as these variables increase, tourism reduces. The result also indicates that political and economic risk affects tourism.

Model II Summary
The model below shows the relationship between the independent variable (Tourism) and dependent variable (Gross Domestic Product). Investment, employment by tourism sector and total number of tourists were used in measuring Tourism. The Gross Domestic Product was used as a measure of economy performance

$H_2$: Tourism significantly affects economy performance

### Table 3: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>$R$ Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.666$^a$</td>
<td>.444</td>
<td>.205</td>
<td>159482.79841</td>
</tr>
</tbody>
</table>

DW: 1.109

The result shows that there is a 66.6 % relationship between tourism and GDP. The coefficient of determination which is the adjusted $R^2$ is 20.5% and this shows that 20.5 % of variation in GDP is caused by tourism while 56.6 % is explained by other factors.

The Anova results show the significance of the model. It is employed to test the significance of the effect of tourism on gross domestic product.

### Table 4: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>$F$</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>141940700754.050</td>
<td>3</td>
<td>47313566918.017</td>
<td>1.860</td>
<td>.025$^c$</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>178043340924.677</td>
<td>7</td>
<td>25434762989.240</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>319984041678.727</td>
<td>10</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: GDP
b. Predictors: (Constant), INVEST, EMPL, TOU

The F-Stat is significant at 0.05 (5%) interval level ($p=0.025<0.05$). And this shows that the model is a good fit, thereby rejecting the null hypothesis and accepting the alternative hypothesis.

**Coefficients:**
The coefficient table shows the contribution of each variable to the model. It reveals the significance of Investment, employment by tourism sector and total number of tourists on gross domestic product.

### Table 5: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficient</th>
<th>Standardized Coefficient</th>
<th>$T$</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>2.735</td>
<td>3591.20</td>
<td>-0.74</td>
<td>.043</td>
</tr>
<tr>
<td>TOU</td>
<td>-1.243</td>
<td>470.147</td>
<td>-2.488</td>
<td>-2.102</td>
</tr>
<tr>
<td>EMPL</td>
<td>1.939</td>
<td>660.904</td>
<td>2.091</td>
<td>1.808</td>
</tr>
<tr>
<td>INVEST</td>
<td>1.460</td>
<td>150.343</td>
<td>.357</td>
<td>1.198</td>
</tr>
</tbody>
</table>

The result also shows that total number of tourists has an indirect effect on Gross Domestic Product. That is, total number of tourist ($\beta = -2.448$, $t = -2.102$, $P = 0.024$) increases, Gross Domestic Product reduces. Employment and Investment have positive effect on Gross Domestic Product. This indicates that as EMPL ($\beta = 2.091$, $t = 1.808$, $P = 0.013$), and INVEST ($\beta = -0.357$, $t = 1.198$, $P = 0.00$), increases, GDP increases

**Discussion of Findings**
The results show that political and economic risk have an effect on tourism and tourism has a significant impact on economic performance. The analysis supports the finding of Yusuff and Akinde (2015) which shows that tourism development affects economic growth and the findings of Poirier (1997) that political risk has an effect on tourism. The exchange rate and inflation rate are strong variables in the analysis of political and economic risk impact on tourism. The results also show that regulatory quality and rule of law have a weak but positive relationship in the analysis of political and economic risk analysis on tourism. Furthermore, the result also shows that the direct, induced and indirect impact of tourism has a significant impact on the GDP. Employment creation and investment in tourism which are the impact of tourism on GDP are statistical relevant in the analysis of tourism effect on the GDP.

5. Conclusion and Recommendation
The study examined the dynamic effect of political and economic risk, tourism and economic performance in Nigeria from 2005-2015. The study adopted a regression approach and found out that political and economic risk influence tourism activities in Nigeria. The significant effect of political and economic risk on tourism calls for adequate security in the country, better legal and institutional framework which will bring about establishment of more hotels and increase investment on tourism, better transport, create a business enabling environment with reduced interest and provide measures to enhance the value of the local currency, and more investment in infrastructures and tourism centers in order to increase tourism activities in the country.

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INDUSTRIALISATION AND ECONOMIC GROWTH IN NIGERIA (1981 TO 2016)

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ABSTRACTS

In Nigeria, industrialists have been badly starved of the very important ingredient for both the establishment and maintenance of industries. This study examines industrialization and economic growth in Nigeria from 1981 to 2016. The study based on descriptive research design, utilized annual time series data sourced from Central Bank of Nigeria (CBN) Statistical Bulletin. In the estimation of the data, the Ordinary Least Squares regression technique was deployed. The result showed that industrialisation ($\beta = 1.124636$, $t = 6.470714$, $p < .05$) and inflation rate ($\beta = 0.003141$, $t = 4.686632$, $p < .05$) have a positive effect on economic growth in Nigeria while foreign investment ($\beta = 0.019990$, $t = 1.496935$, $p > .05$) does not showed any effect on economic growth. By implication, though industrialisation enhances economic growth in Nigeria but the pace of economic growth in the country is inflationary. Among others, the study recommends the need for government to promote the establishment of firms especially in the manufacturing industries to encourage industrialisation. Also, government should implement strategic policies that will create a fair playing ground for both local and foreign investors to enhance industrialisation.

Keywords: Economic Growth, Industrialisation, Poverty, Food security, Food availability

Word Counts: 169

1. Introduction

Every country is aspiring to have a viable economic system that can compete with the rest of the world in terms of human capital development, health outcomes, education, military system and transport and telecommunication among others. This objective cannot be achieve without achieving a continuous increase in the level of production of goods and services because it is only when productivity of a nation expands, that consumption, income, government expenditure and export can grow all of which are essential to improve the welfare of the people in terms of education and health. Meanwhile, the continuous increase in the level of production of goods and services is termed economic growth. According to Jhingan, (2006) is a quantitative sustained increase in a country’s per capita income or an expansion in labour force, consumption, capital and volume of trade.

The world economy grew from an agrarian economy to an industrial economy and now to an information economy with the recent spread of information as a result of the advancement in technology especially internet. In all of these stages of transition, the transition into an industrial economy remains a cornerstone of progress for the world as a whole. This is because of the important role of industrialisation in the transformation of raw inputs from the agricultural sector into marketable final goods that can be bought and sold in the market while utilizing the available information in the market. With industrialisation, which connotes a high rate of utilisation of men, money, machine and material resources and the application of technology to produce goods and services, more jobs are created, poverty is reduced and regional development is promoted as well as technological progress (Effiom & Udah, 2014).

A strong and thriving manufacturing sector is a precondition for industrialisation (Bennett & Anyanwu, 2015). Thus, only very few countries have been able to grow and accumulate wealth without investing in their manufacturing industries. Industrialisation has been a much emphasized development strategy that can help to overcome her challenges of economic backwardness. However, the performance of industrialisation in the country has not been quite impressive (Bennett and Anyanwu, 2015). Nigerian industrialists have been badly starved of the very important ingredient for industrial development evident from issues such as: inadequate initial capital for takeoff, inadequate funds for maintaining existing industries, insufficient funds for expansion. The lack of funds and enabling environment for industrialists has
greatly denied the nation the capacity of achieving significant industrial growth or industrialisation which Nigeria has always hoped and craved for (Bennett & Anyanwu, 2015).

The oil and gas sector is a major player in the economy and contributes about 95% to the country’s export earnings compared to the industrial sector which only accounts for small portion (about 6%) of the economic activity (Aliya & Odoh, 2016). While the exact relationship between industrialisation and economic development has been a controversial issue in the economic literature, not many economists doubt the capacity of industry for rapid growth and in turning sharply the table of economic progress. It is in the light of the foregoing that this study seeks to examine industrialisation and economic growth in Nigeria. The specific objectives are to: Examine the trend of industrialisation and economic growth in Nigeria; Investigates the contribution of industrial output to economic growth in Nigeria; and examine the effect of foreign investment economic growth in Nigeria.

This study examines industrialisation and economic growth following a country specific analysis with a special focus on Nigeria. The study shall use annual time series data covering the period from 1981 to 2016. The choice of the period was informed by the need to capture the periods of different policy reforms that led to the change in the investment atmosphere in Nigeria. The study contributes to the literature on Dutch disease since a boom in resource rents shifts labour away from the tradable industrial sector and towards non-tradable services. This study, investigates this mechanism in order to explain the reasons for the significant portion of the rapid industrialisation experience of the developing world that has been overlooked in most previous studies on Dutch Disease.

2. Literature Review
An industry is a number of firms producing broadly similar commodities or firms whose output serves as input resources for other firms in the sector. Adejugbe, (2004) defines industrialisation as the process of channeling human and material resources, with increasing application of science and technology to the production of goods and services, (Beckerman, 2007). Osita (2007) looks at industrialisation as the progressive ability of a people to harness human and material resources for the production of goods and services as is a key component of economic development. On the other end, economic growth is seen as a steady process of increasing the productive capacity of the economy and hence, of increasing national income being characterized by higher rates of increase of per capita output and total factor productivity, especially labour productivity (Balami, 2006). According to Simon Kuznets (2008) economic growth is a long term rise in the ability to supply increasingly diverse economic goods to the people.

On the theoretical ground, the classical theory of economic growth in line with Smith focused on increasing productivity through the division of labour and specialization, which resulted in greater productive efficiency. He considered that the profits gained in agriculture and industries contribute the increase in savings, which leads to increase investment, and thereby increases growth. Also, the division of labour, increasing productivity, applies to industry more than agriculture (Thirlwall, 1999). In Solow model, other things being equal, saving/investment and population growth rates are important determinants of economic growth. Solow extended the Harrod-Domar model by adding labor as a factor of production and capital-output ratios that are not fixed as they are in the Harrod-Domar model. These refinements allow increasing capital intensity to be distinguished from technological progress.

On the empirical ground, Mario, Amat and Šikić (2016) analyse industrialisation patterns in Europe, implications of economic backwardness and the role of European integration in facilitating industrialisation and development. The study finds evidence of some income convergence in Europe, but mostly in countries that were able to exploit the ‘advantages of (mild) backwardness’. Regions of extensive backwardness such as the Balkans had difficulties to catch up. Membership in the European Union helped especially more backward economies to develop faster. In a similar vein, Aboagye (2016) used panel data from 1980 to 2015 covering 36 SSA countries and found that, in the longrun, both urbanization and industrialisation tend to increase energy intensity in the 36 selected SSA countries while the contrary is established for FDI and trade openness. Inflation was also found to be associated with rises in energy intensity in SSA. Additionally, the finding confirms the existence of a valid EKC hypothesis for energy intensity; the existence of an inverted U-shaped relationship between economic growth and energy intensity in SSA. Finally, it is observed that the SADC zone of the region, in particular, is exhibiting rising energy intensity as compared to the ECOWAS sub-region. Also, Anyanwu, Kalu and Alexandra (2015) investigated the effect industrial development on the Nigeria's economic growth 1973-2013. The model explain that the influence of industrial output on economic growth is not statistically significant, though the sign obtained from its ã priori expectation is positively related to (economic growth) GDP but does not hold strong enough.
3. Methodology

This study used ex post factor research design. This is because the design is a quasi-experimental study used to examine how an independent variable, present prior to the study in the participants, affects a dependent variable. This study examined how infrastructure affect the industrial output in Nigeria based on quantitative analysis of data. The model specification used in this research followed the model of Romer (1986), which was established due to the weakness of the Solow growth model. The production function under the Solow growth model implies that \( Y = f(K, L) \), where technology is exogenously determined. The Romer model is different as technology which is seen as energy, is an endogenous variable. Romer takes investment in research technology as endogenous factor in terms of the acquisition of new knowledge by rational profit maximization firms. His aggregate production function of the endogenous theory is as follows:

\[ Y = f(A, K, L) \] (1)

Where: \( Y = \) aggregate real output; \( K = \) stock of capital; \( L = \) stock of labour; and \( A = \) Technology (or technology advancement). Adopting this model, \( Y \) or the aggregate real output is used as a proxy for Industrial output growth is expressed as a function of capital, labour employed, energy disaggregated into electricity generation and consumption.

The Romer model specified in equation one above is modified in line with the study conducted by Bennett, Anyanwu, and Kalu (2015) on the effect of industrial development on the Nigeria’s economic growth where Gross Domestic Product at current basic price was the dependent variable while industrial output growth, total savings, foreign investment and inflation rate were the explanatory variables. In the present study, real Gross Domestic Product which proxy economic growth was the dependent variable while industrial output, foreign investment and inflation rate are the explanatory variables in line with the study objective. The functional relationship among the variables is specified as follows:

\[ RGDP = f(IOU, FDI, INFR) \] (1)

For the purpose of estimation, equation (1) can be expressed as:

\[ RGDP = \beta_0 + \beta_1 IOU + \beta_2 FDI + \beta_3 INFR + \mu_t \] (2)

Where: \( RGDP = \) real gross domestic product proxy for economic growth, \( IOU = \) industrial output proxy by industrial GDP, \( FDI = \) foreign investment and \( INFR = \) inflation rate.

The economic a priori test is conducted to examine the magnitude and size of the parameters estimate. This evaluation is guided by economic theory to ascertain if the parameter estimate conforms to expectation. The a priori expectations of the variables are summarized below: Industrial Output in line with economic theory is expected to have a positive impact on economic growth i.e

\[ \frac{\partial RGDP}{\partial IOU} > 0 \]

Foreign investment with economic theory is expected to have a positive impact on economic growth i.e

\[ \frac{\partial RGDP}{\partial FDI} > 0 \]

inflation in line with economic theory is expected to have a negative impact on economic growth i.e

\[ \frac{\partial RGDP}{\partial INFL} < 0 \]

This study used secondary annual time-series data for the period of 1981 to 2016 collected from the Central Bank of Nigeria Statistical Bulletin and World Bank Development Index. The choice of the period was informed by the need to ensure that the period of observation is large enough to ensure that the estimates of the model approach a normal distribution such that they closely approximate the true parameters. The Ordinary Least Squares (OLS) approach is employed in this study in the estimation. The choice of OLS as the estimation technique was based on the fact that the technique is easier to use and also has all the computing power required.
4. **Results and Discussion**

4.1 **Descriptive Analysis**

The result of the descriptive analysis is presented in table 1.

**Table 1: Descriptive statistics**

<table>
<thead>
<tr>
<th></th>
<th>RGDP</th>
<th>IOU</th>
<th>FDI</th>
<th>INFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>31757.15</td>
<td>9306.571</td>
<td>2463.033</td>
<td>78.92222</td>
</tr>
<tr>
<td>Median</td>
<td>22391.14</td>
<td>8546.755</td>
<td>639.350</td>
<td>63.55000</td>
</tr>
<tr>
<td>Maximum</td>
<td>69023.93</td>
<td>13791.25</td>
<td>29660.30</td>
<td>216.0000</td>
</tr>
<tr>
<td>Minimum</td>
<td>13779.26</td>
<td>5264.880</td>
<td>22.20000</td>
<td>1.000000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>18151.71</td>
<td>2506.812</td>
<td>5742.203</td>
<td>71.70704</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.874864</td>
<td>0.195011</td>
<td>3.549265</td>
<td>0.394063</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.318378</td>
<td>1.787138</td>
<td>15.83408</td>
<td>1.772296</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>5.289230</td>
<td>2.434728</td>
<td>322.6541</td>
<td>3.192598</td>
</tr>
<tr>
<td>Probability</td>
<td>0.071033</td>
<td>0.296009</td>
<td>0.000000</td>
<td>0.202645</td>
</tr>
<tr>
<td>Sum</td>
<td>1143257.</td>
<td>335036.5</td>
<td>88669.20</td>
<td>2841.200</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>1.15E+10</td>
<td>2.20E+08</td>
<td>1.15E+09</td>
<td>179966.5</td>
</tr>
<tr>
<td>Observations</td>
<td>36</td>
<td>36</td>
<td>36</td>
<td>36</td>
</tr>
</tbody>
</table>

**Source:** Author, 2019.

The table 1 above showed that Jarque-Bera P-value for RGDP is significant @ 10% since it is less than 0.10 and FDI is significant @ 5% since the Jarque-Bera P-value is less than 0.05 as such the variables are normally distributed around the mean except for industrial output and inflation which were 0.298 and 0.202 respectively.

The result of the correlation analysis to show the direction and strength of the association among the variables is presented as follows:

**Table 2: Correlation Analysis Matrix**

<table>
<thead>
<tr>
<th></th>
<th>RGDP</th>
<th>IOU</th>
<th>FDI</th>
<th>INFR</th>
</tr>
</thead>
<tbody>
<tr>
<td>RGDP</td>
<td>1.000000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IOU</td>
<td>0.837629</td>
<td>1.000000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDI</td>
<td>-0.199839</td>
<td>-0.162575</td>
<td>1.000000</td>
<td></td>
</tr>
<tr>
<td>INFR</td>
<td>0.890086</td>
<td>0.903596</td>
<td>-0.293733</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

**Source:** Author, 2019.

In table 3 there was statistical evidence that industrial output and inflation rate have a positive association with economic growth in Nigeria while the effect of foreign investment on economic growth was negative. That is the higher the industrial output and inflation rate, the higher the pace of economic growth in Nigeria.

The trend of economic growth in Nigeria is presented using the line graph as follows:

**Figure 1: Trend of Economic Growth in Nigeria 1981-2016**

![Economic Growth Graph](image)
Figure 1 showed that between 1981 and 1999, the level of economic growth has been relatively low but relatively stable. From this period to 2014 there was a sharp rise in the level of economic growth in Nigeria. However, between 2015 and thereafter, there was a sharp fall in economic growth in Nigeria.

Figure 2 showed that the trend of industrialisation is Nigeria has been on a sluggish rise with high degree of instability moving upward and downward. It was evident that, despite the various industrial growth strategy of successive government, industrialisation in Nigeria still remains unstable and even in the recent years and up till 2016 the trend has been on the decline.

4.2. Empirical Results
The result of the estimation of the model using the least squares regression estimation technique is presented as follows:

**Table 3: Result of OLS Estimates**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOU</td>
<td>1.124636</td>
<td>0.173804</td>
<td>6.470714</td>
<td>0.0000</td>
</tr>
<tr>
<td>FDI</td>
<td>0.019990</td>
<td>0.013354</td>
<td>1.496935</td>
<td>0.1442</td>
</tr>
<tr>
<td>IFR</td>
<td>0.003141</td>
<td>0.000670</td>
<td>4.686632</td>
<td>0.0000</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.392371</td>
<td>1.515711</td>
<td>-0.258869</td>
<td>0.7974</td>
</tr>
</tbody>
</table>

**R-squared** 0.952809
**Adjusted R-squared** 0.948385
**F-statistic** 215.3670
**Prob(F-statistic)** 0.000000
**Durbin-Watson stat** 1.577753

The OLS estimates presented in Table 3 showed that industrialisation ($\beta=1.124636$, $t=6.470714$, $p<.05$) and inflation rate ($\beta=0.003141$, $t=4.686632$, $p<.05$) have a significant positive effect on economic growth in Nigeria while foreign investment ($\beta=0.019990$, $t=1.496935$, $p>.05$) show an insignificant positive effect on economic growth. The result showed that a unit change in industrialization will lead to about 1.12 change in economic growth while a unit change in inflation rate will lead to about 0.003 change in economic growth in Nigeria. The positive effect of inflation on industrial output suggests the fact that as inflation rate rising, economic growth is also increasing which shows that, the growth rate in Nigeria is inflationary. The coefficient of determination $R^2$ which is 0.952809 explained the variations in economic growth adequately. The value indicates that the explanatory variables account for about 95% of the variations in economic growth while the remaining 5% is explained by other factors outside the study. The adjusted coefficient of determination 0.948385 indicates that as the sample size expanded indefinitely about 95% of the variations in economic growth will still be explain by the explanatory variables.
The Durbin Watson test checks for the existence of autocorrelation among error terms.

**Variables**

**Factors**

**Source**: Eview 9.0 output, 2019

In the model, the estimation result for the serial correlation shows a DW test statistic value is 1.577753 with 36 observations and 3 explanatory variables excluding the constant term which is approximately equal to two indicating that there is no evidence for the presence of autocorrelation.

It was evident from the result that industrialisation has a significant positive effect on economic growth in Nigeria. This result supported the notion that industrialisation is a crucial and powerful engine in the overall development process. This result corroborated the findings of Anyanwu, Kalu and Alexander (2015) on the effect industrial development on the Nigeria’s economic growth 1973 - 2013. The model explain that the influence of industrial output on economic growth is not statistically significant, though the sign obtained from its à priori expectation is positively related to (economic growth) GDP but does not hold strong enough. The result also gave credence to Mario, Amat and Šikić (2016) on the analyses of industrialisation patterns in Europe, implications of economic backwardness and the role of European integration in facilitating industrialisation and development. The study finds evidence of some income convergence in Europe, but mostly in countries that were able to exploit the ‘advantages of (mild) backwardness’. Regions of extensive backwardness such as the Balkans had difficulties to catch up. Membership in the European Union helped especially more backward economies to develop faster.

5. **Conclusion and Recommendations**

The study concluded that industrialisation has a significant positive effect on economic growth in Nigeria. By implication, as more and more firms are being set up to produce goods and services in the country, the overall economic output is increasing despite the challenges faced by these firms such as poor infrastructure, epileptic power supply, government hostile policies to mention but few. Hence, as a policy implication, the implementation of strategies and policies that can boost industrialization will promote economic growth in Nigeria. Thus, the following policy options are recommended with the aim to keep the pace of industrial growth: Government needs to promote the establishment of more firms especially in the manufacturing industries to boost industrialisation. Government also needs to implement strategic policies that will create a fair playing ground for both local and foreign investors in the process of industrialisation. The Bank of Industry (BOI) established to boost industrialisation needs to be made accessible to all investors intending to set up one firms or the other.

**REFERENCES**


NATION BUILDING IN RETROSPECT: AN APPRAISAL OF THE NIGERIAN REALITIES; THE PAST, PRESENT AND FUTURE.

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Abstract
Nation building is constructing or structuring a national identity using the power of the state. The march to nationhood in Nigeria began when Lagos was invaded by British forces in 1851 and formally annexed in 1861. Nigeria became a British protectorate in 1901. Colonization lasted until 1960, when an independence movement succeeded in gaining Nigeria its independence. Nigeria became a republic once again after a new constitution was written in 1979. Nigeria’s struggle for ‘oneness’ and ‘togetherness’ often perceived as nation building has had its fair share of both negative and positive outcomes. This paper attempts to mirror both the latent and manifest developments and outcomes and the general implication on the general concept of nationhood and nation building. The pre-colonial Nigeria saw relative development at different independent nations (ethnic groups) but how this translated to nation building is interrogated and the grave consequence leading to regionalism. Internal rancour among the political parties ensured that political parties were first only a means to individual ends and not the collective or national end hence the building block of nationhood was laid without the consciousness of nationhood. The paper concludes and recommended that there should be a dismantling of the fabrics and foundation of ethnic and regional politics which have eaten deep into the psyche of present politicians and leaders and an enduring restructuring of the present federal structure.

Keywords: Nationalism, Nationhood, Nation building, Regionalism

INTRODUCTION
Nation-building is the product of conscious statecraft, not happenstance. It is always a work-in-progress; a dynamic process in constant need of nurturing and re-invention. It never stops and true nation-building processes never rest because all nations are constantly facing up to new challenges. Nation building is constructing or structuring a national identity using the power of the state. The march to nationhood in Nigeria began when Lagos was invaded by British forces in 1851 and formally annexed in 1861. Nigeria became a British protectorate in 1901. Colonization lasted until 1960, when an independence movement succeeded in gaining Nigeria its independence. Nigeria became a republic once again after the 1963 constitution made it a republic but with the incessant military interventions in the polity, that status suffered a while but the 1979 constitution amplified that status. Nigeria’s struggle for ‘oneness’ and ‘togetherness’ often perceived as nation building has had its fair share of both negative and positive outcomes. The pre-colonial Nigeria saw relative development at different independent nations (ethnic groups) but how this translated to nation building was a concern which had a grave consequence leading to regionalism. In this era, internal rancour among the political parties ensured that political parties were first only a means to individual ends and not the collective or national end hence the building block of nationhood was laid without the consciousness of nationhood. The case of Nigeria’s Nation Building quest has been that of collective efforts made by well-meaning nationalists’ leaders; from Herbert Macauley to Dr. Nnamdi Azikiwe and Chief Obafemi Awolowo, to Alhaji Abubakar Tafawa Belewa and finally Alhaji Sir Ahmadu Bello. Their individual contributions to nation building in Nigeria cannot be undermined.

In a review of Kalu Ezera’s book, Constitutional Development in Nigeria, R.E. Wraith referred to the Governor, Sir Arthur Richards, as ‘Nigeria’s most hated Englishman’ (Kalu, 1960). That description does not seem inappropriate judging by the vehemence of the opposition aroused in several articulate Nigeria in 1946. The Colonial Administration, in hind-sight, discovered that it was not the constitution devised by Sir Arthur Richards that was bad to the extent of its vehement repudiation, but that it was the arbitrariness of its imposition on Nigerians that brought forth unpopularity for its author (Kalu, 1960).
The purpose of the new Government, in Foot’s own words, was ‘not only consultation but also the awakening of political awareness in every corner of the country’. The Government went almost into the extreme of over consultation in drafting the new constitution (Onabamiro, 1983).

The development of political parties in Nigeria dates back to 1923 when the Nigerian National Democratic Party was launched (Onabamiro, 1983). This followed the establishment of the Nigerian Legislative Council to provide some political space for the participation of indigenes. Franchise was, however, limited with the formation of the Nigerian Youth Movement in 1938 and the National Council of Nigeria and the Cameroons (NCNC) in 1944 under the leadership of Herbert Macauley. The Action Group (AG) emerged in 1948 while the NPC was established in 1951(Coleman, 1986).

These parties constituted themselves as political expressions of ethno-regional; associations with the Action Group in the West evolving from a Yoruba cultural association – Egbe Omo Odudua, the Northern Peoples’ Congress (NPC) evolving from the northern cultural association, Jamiyar Mutanen Arewa and the National Congress of Nigerian Citizens (NCNC) which started as a national party but later narrowed its social base to a cultural association, the Igbo State’ Union of the south east. These ethno-regional elites blocs struggled against each other in configuring the politics of the geographic space called Nigeria (Jeremy, 2013).

**ACTIVITIES OF PRE-INDEPENDENCE NATIONALISTS THAT INFLUENCED NATION BUILDING PROCESS IN NIGERIA**

The activities of great nationalist of Nigeria affected the nation building process in no small measure. In obvious facts their activities led to the establishment of strong political, social and cultural institutions that ultimately ushered in the independence that Nigerians craved for. These activities were also unconsciously laying a stumbling block for the smooth building of nationhood in Nigeria.

It is worthy of note that Herbert Samuel Heelas Macauley formed the Nigeria National Democratic Party (NNDP) in 1920 in order to fight the Eleko issue effectively. Due to the 1922 new arrangement of allowing four Nigerians as members of a reformed Legislative Council, Macauley used the political party to capture three seats. The NNDP repeated the performance in Lagos again in 1928 and in 1933 as it was virtually the only contesting party in the field. (Coleman, 1986). The beginning of party rivalry was set in motion when in 1936, when four young men came together and formed the Nigerian Youth Movement (NYM). These four men were: Dr. J.C. Vangham, Ernest Ikoli, H.O. Davis and Samuel Akinsanya. The following year, the NYM was strengthened by the membership of Dr. Nnamdi Azikiwe (Onabamiro, 1983).

In 1938, NYM won all the seats to the Lagos town Council and all the three seats in the Legislative Council, thus putting one end to the fifteen year old electoral rule of the NNDP.

In 1941, the NYM was engulfed in a crisis from which it never recovered. Dr. Kolo Abayomi resigned his seat in the Legislative Council and two of the four founding fathers of the movement, Ernest Ikoli and Samuel Akinsanya became rivals for contesting the vacant seat. When the Movement executive officially endorsed the candidature of Ernest Ikoli, who subsequently won the seat, a section of the party alleged anti-Ijebu bias against the Lagosian members of the party as the reason for Akinsanya’s defeat (Uzoechi, 2004). This section felt so strongly about the matter that they resigned their membership of the Movement. This internal rancour in NYM laid a foundation of ethnically based party alignment among party members and citizens (Onabamiro, 1983).

It is of interest to recall that both Nnamdi Azikiwe and Obafemi Awolowo were joined together in the issue, the more so as Azikiwe was not himself an Ijebu man. Some commentators have, however, given an additional reason for Azikiwe’s resignation from the NYM. They argued that the founding of the "Daily Service" newspaper in 1938 as a potential rival to Azikiwe’s own newspaper, the "West African Pilot" had caused his resentment even two years before the Ikoli versus Akinsanya issue (Onabamiro, 1986).

So, from the case of newspaper established along ethnic lines with ethnic bigotry has part of their formative intrinsic tendencies to political parties formed along ethnic lines. These also laid bad foundation for Nigerian nationhood quest. The political climate of Lagos then remained a diffuse state for two years until an incident occurred in 1944.

**THE EMERGENCE OF MORE POLITICAL PARTIES**

King’s College boys were living in hired lodgings in Customs Street because their college building had been commandeered by the army. They did not like it. So they went on strike in March, 1944: they refused to attend lectures in protest. The manner the government handled the issue displeased the students. They met and set up the National Council of Nigeria, which was in effect a political party. It was later to be renamed as NCNC: National Council of Nigeria and the Cameroons in 1945, January, because of the registration of
three Cameroonian groups in the party. The West African Pilot of Dr. Nnamdi Azikiwe became the mouthpiece of the party; while the NVM had "The Daily Service". Dr. Nnamdi Azikiwe and Herbert Macauley led this new party – NCNC (Onabamiro, 1983).

The decision of the then colonial Governor, Sir Arthur Richard to publish in 1945 a proposal for a new constitution whereby Nigeria was to be administered as three regions; further laid credence and strong foundation for nationalism anchored on ethnic bigotry.

In another development, Obafemi Awolowo with some prominent Yorubas in London had formed in 1945, a Yoruba cultural society called "Egbe Omo Odududwa". The original founders of the Egbe were Obafemi Awolowo, C.O. Taiwo Akintola, Dr. Oni Akerele, A.B. Oyediran and others. When the new Governor, Sir. John Macpherson set up the machinery for a comprehensive constitutional review which started in March 1949, the time was judged right to transform the cultural Egbe into a full-blown political party called the Action Group (AG) (Onabamiro, 1983).

THE NORTHERN EXPERIENCE

A similar transformation of a cultural organization into a political party also took place in the North. In 1948, Dr. Dikko, the first Northern Nigerian to qualify in medicine, had gathered together a group of his educated friends and colleagues in Zaria to form a cultural association with no political motives at all. Both Tafawa Balewa and Ahmadu Bello, the Sarduana of Sokoto, were members by virtue of their membership of the Northern Teachers’ Association with which Dr. Dikko’s society was affiliated. But when the first Regional Elections were in sight, a political party was found necessary for the purpose of campaigning for the elections. The new party bore the old name of the cultural society, the Northern Peoples’ Congress (NPC). NPC was less radical and more conservative due to Ahmadu Bello and Tafawa Balewa. But Aminu Kano had to leave the party because he was more radical (Coleman, 1958).

Aminu Kano supported a group of eight young men in establishing a radical party led by Abba Maikwaru, Bello Ijuru, Maitama Sule, Sani Darma and others. The party was Northern Elements Progressive Union (NEPU). By the time the regional elections were held in December, 1951, the major political parties in the country were:

1. The NCNC (Igbo) - 1944
2. AG (Yoruba) - 1948
3. The NPC (Hausa-Fulani) - 1951
4. The NEPU (Hausa-Fulani) - 1950

It is noteworthy that there were some smaller parties in various forms of affiliations with the major parties.

ANTONIO GRAMSCI’S THEORY ON HEGEMONY

To have a proper outlook of how the past contributions of Nigeria’s nationalists had in no small measure affected the present and future nationalist struggle, we take recourse to Gramsci’s theory of hegemony. Gramsci’s position emphasized the defect of economic determinism as a basis of control. Despite the importance of the economic infrastructure as a background against which events took place, he believed that ideas and beliefs were equally important. He viewed the super structure of society as comprising two parts: the political society and the civil society.

He noted that the political society is the state which controls the instruments of coercion while the civil society comprises of institutions such as the church, trade unions, the mass media and political parties. He saw the political society as the activities of the dominant class; if the dominant class gains the approval of the members of the society, it has achieved hegemony. Hegemony is achieved by persuading the population to accept the political and moral values of the ruling class (Gramsci, 1973).

Hegemony is, therefore, possible where there exist some sort of alliance between a fraction of the ruling class and the subject class. Gramsci’s called such an alliance a historic block but what usually obtains is a compromise between the groups involved. Hegemony is the power or dominance that one social group holds over another. According to Gramsci, mass media are tools that ruling elites use to “perpetuate their power, wealth and status [by popularizing] their own philosophy, culture and morality” (Boggs, 1976).

Gramsci’s postulation fits this study in that the concept of ethnicity has degenerated into powerful political groups of different factions, using the umbrella of these groups to pursue personal and selfish ambitions at the expense of the group’s interest. Also the ruling elites in these groups has seized these groups to realize their interest and raising agitations within and among these groups whenever their interest are not being met or achieved. The case of Nigeria’s political parties that were formed along ethnic lines and design to meet the interest of specific ethnic groups, attest to Gramsci’s postulations in the theory of Hegemony or ideological hegemony.
Be that as it may, the realities in Nigeria speak more for itself when placed side-side with other heterogeneous but developed countries in the world. Countries such as the United States of America with fifty-two states and only six ethnic groups are recognized by census; which are: white, black, Asian, Amerindian/Alaska native, native Hawaiian/Pacific Islander and mixed ethnicity. The problem then could be tied to the extremely numerous numbers of the ethnic groups in Nigeria. Let’s assume for a moment that Nigeria only has three ethnic groups, would the situation have been the same? But the reality shows that the application of the concept of ethnicity has no doubt given rise to endless agitations and unrest in the polity. Yet to recover from all the dust that were raised during the 2019 Presidential Elections in Nigeria, there are already comments about an particular ethnic group that should be given the opportunity to rule in or throw up the president in 2023. The focus, obviously, is not on developmental course of action but on political strategies to gaining power by one ethnic group. This reality further laid credence to the adoption of Gramsci’s theory of Hegemony.

**THE EFFECT OF THE 1949 CONSTITUTIONAL CONFERENCE ON NATION BUILDING IN NIGERIA**

The Constitutional Conference organized between March and September, 1949 on which discussions were held at divisional provincial and regional levels created division among the regions. Issue of representation in the House of Representatives brought disagreement between the North and the South. The North delegates insisted on parity with the combined strengths of the Southern representatives (Onabamiro, 1983). The North won on the issue. This further divided the regions; thereby making the quest for nationhood an uphill task for future generations.

The new constitution provided for a federal system of government with a fairly strong, central legislature and executive. The central executive, called Council of State would have six ex-officials and twelve unofficial members, who would be styled ministers.

In the ensuring general elections of December 1951, the NCNC won a huge majority in the Eastern House of Assembly, the Action Group secured a majority in the Western House of Assembly; but it was alleged that this was achieved in the latter House after some members who contested on the NCNC platform 'crossed the carpet' to the AG side. The NPC won a sweeping victory in the Northern House of Assembly. The three respective Houses of Assembly were constituted as the Electoral Colleges for electing members to the House of Representatives in Lagos.

**THE CONTENDING ISSUES**

The real question is why has the task of nation-building been so difficult in Nigeria, and the fruits so patchy, despite our enormous human and natural resources? These can be interrogated in three critical areas:

1. Threats and challenges posed by the environment for nation-building;
2. The quality of leadership that has confronted these challenges; and
3. The fragility and fragmentation of political and developmental institutions.

We need to understand the environment for nation-building in Nigeria, so we can clearly identify our strengths, weaknesses, and core challenges. We also need to evolve a system of leadership selection and accountability which produces the sort of leaders that will confront the challenges of the environment in a way that is beneficial for nation-building. As we have argued at the beginning, nations are a product of the human will and imagination and the institutions that sustain their collective efforts. Therefore, we must find these resources in ourselves if we are to succeed in building our nation; otherwise, to paraphrase Shakespeare, “default would be not in our styles but in ourselves”.

**CHALLENGES BEFORE NIGERIAN NATION-BUILDING: THE FUTURE**

Nigeria faces five main nation-building challenges:

1. The challenge from our history;
2. The challenge of socio-economic inequalities;
3. The challenges of an appropriate constitutional settlement;
4. The challenges of building institutions for democracy and development; and
5. The challenge of leadership.

We need to understand the environment for nation-building in Nigeria, so we can clearly identify our strengths, weaknesses, and core challenges. We also need to evolve a system of leadership selection and accountability which produces the sort of leaders that will confront the challenges of the environment in a way that is beneficial for nation-building.

We would argue, therefore, that the key values of federalism, democracy, and inclusive government have not been sufficiently consolidated as core values for our nation. Some important questions regarding each of these three key values remain unanswered. And in many instances, there is a discrepancy between the
letter and the spirit. Building consensus around these three key values remains a constitutional challenge for nation-building. Nigeria needs a constitutional settlement that commands the acceptance, if not the respect, of a majority of its over 200 million citizens. The 1999 constitution bequeathed by the military is defective in many important respects. Attempts to correct these defects through the National Political Reform Conference (NPRC) of 2005, the Constitutional Reform Bill of 2006 which was debated and rejected by the National Assembly, and recently, the National Conference organized by former President Goodluck Jonathan have so far failed (thisday, 2005)

It is worthy of note that the foundation of this short-coming was laid by the pre-independence nationalists, who perhaps unconsciously laid the stumbling block of future catastrophe.

According to Chinua Achebe, in his book, 'The Trouble with Nigeria', the ultimate failure of Nigeria is the failure of leadership (Achebe, 1984). Worthy of note is that this was noted three and a half decades ago and it is as accurate, current and applicable to today’s realities in Nigeria. Leadership is a critical factor in nation-building and it should be understood in two important but related ways. Firstly, there are the personal qualities of integrity, honesty, commitment, and competence of individual leaders at the top. Secondly, there are the collective qualities of common vision, focus, and desire for development of the elites as a whole.

The standards for recruitment and the performance of our individual leaders over the years have left much to be desired. Leaders with the requisite credentials not based on ethnicity and other trivial and unacceptable criteria set by a few who themselves are not conversant with the needs of the people should not emerge. A great critical mass or population who are not only docile but can be easily compromised because of poverty and desire for immediate gratification have not helped in the selection process. Nationalists are not leaders who see themselves as champions of only some sections of our population, leaders who do not understand the economic and political problems of the country, not to talk of finding durable solutions for them, not leaders who are more interested in silencing their opponents than in pursuing justice. We do not need leaders who place themselves above the constitution and the laws of the country, but leaders who lead by upholding and respecting the law. We do not need leaders who have no sense of tomorrow, other than that of their private bank accounts.

If we are to succeed in nation-building, we must have a leadership that is committed to the rule of law and has a demonstrable sense of fair play and democratic tolerance; a leadership with ability and integrity; above all else, we must have a leadership that can see beyond the ostentatious pomp of office. We must have leaders who have a vision for a Nigeria better than the one they inherited; leaders who will lead by deeds and not by words. We need a leadership that will not only leave its foot-prints on the sands of time, but one, which by dint of hard-work, fair play, dedication and commitment, will live forever in the hearts of Nigerians.

Leadership is not everything, but it is an extremely important factor. Unless we have leaders with ability, integrity, commitment, and vision, we cannot succeed at nation-building. It is gratifying to note that within the judiciary, the National Assembly, and within the Executive, the issue of the quality of leadership is currently receiving attention. We must not relent in this struggle for quality leadership as it is the key to building our nation.

Beyond the qualities of individual leaders, however, there is the equally important question of the quality of the collective leadership offered by the Nigerian elite class as a whole. When we talk about collective elite leadership, we are drawing attention to the collective vision, focus, and discipline of the elites as a whole. Do we have elite that is collectively committed to nation-building?

A comparative outlook of Botswana and Somalia are quite similar when you look at their fundamental characteristics. Both have: (1) one large dominant ethnic group divided into clans; (2) both are sparsely populated in semi-arid conditions; (3) at independence, both depended on livestock for the livelihood of a majority of the population. While the Botswana leadership was collectively focused and had a vision of what it wanted to do with the country, the leadership in Somalia was divided against itself. As a result, Botswana learnt to harness its limited resources for generally agreed objectives. It learned to survive under the shadow of apartheid South Africa. And it learned to manage its diamond resources well when those resources started flowing in. Somalia, on the other hand had a divided leadership, some of whom wanted to build Greater Somalia by military means, while others simply wanted to get on with running the country they inherited from colonialism. As a result, the Somali leadership lacked focus and vision, and often fought itself through conspiracies and military coups. Somalia also went to war with its neighbours. For anybody looking at these two countries today, the difference is clear.
The comparative histories of Botswana and Somalia suggest that we should be concerned not just with the quality of leadership of our Presidents, Governors, Senators and Judges; we should also be concerned by the quality of leadership which we all bring to our professional and personal responsibilities. Nation-building is a collective responsibility; all hands must be on deck for a formidable nation to be built.

When a Nigerian leader, by words and deeds, is able to convince a large enough section of the Nigerian elites and the wider public about a vision for a greater tomorrow, then Nigeria will truly be on the way to national greatness. While our experiences in the past have been disappointing, we have every reason to believe that the future is likely to be better.

CONCLUSION AND RECOMMENDATIONS

Having critically looked at the different factors in the fight for nationhood in Nigeria; it is pertinent to note that the fight can only be won if the foundation, the building blocks of the nationalists can be undone.

The British colonialism created Nigeria, joining diverse peoples and regions in an artificial political entity. It was not unusual that the nationalism that became a political factor in Nigeria during the interwar period derived both from an older political particularism and broad pan-Africanism rather than from any sense of a common Nigerian nationality. Its goal initially was not self-determination, but rather increased participation in the governmental process on a regional level. Inconsistencies in British policy reinforced cleavages based on regional animosities by attempting simultaneously to preserve the indigenous cultures of each area and to introduce modern technology and Western political and social concepts. In the north, appeals to Islamic legitimacy upheld the rule of the emirs, so that nationalist sentiments there were decidedly anti-Western (Onabamiro, 1983).

Early nationalists tended to ignore Nigeria as the focus of patriotism; rather, the common denominator was based on a newly assertive ethnic consciousness, particularly Yoruba and Igbo. Despite their acceptance of European and North American influences, the nationalists were critical of colonialism for its failure to appreciate the antiquity of indigenous cultures.

The quest for independence was, however, achieved through the efforts of Nigeria nationalists but in the same vein, the foundation of politics of ethnicity, loss of oneness (nationhood) was lost. It was a situation of independence without nation building. How long can this geographical space be held together?

In the light of the foregoing, the following recommendations are made:

i. To build a formidable and virile state, the ruling elites should ensure that the different units/states/ethnic groups are treated as distinctively but as one having financial autonomous part (regions) of the whole i.e. the Centre. No unjust special preference should be given to any part or region ahead of others.

ii. Attempt at correcting the fundamental cause of the problem of nation building should be made by politicians and all citizens of the nation. This can be achieved by changing the structural make-up of the current parties in Nigeria; apart from the compulsory establishment of political party’s branches across the nation, an identity of 'Nigerianization' i.e. a true reflection in acts and deeds of a political ideology that promotes the interest of nationhood and not one part or region should be emphasized. A true political ideology is still lacking in all Nigerian political parties.

iii. Development and its indices should be promoted by the Centre in all regions and parts.

iv. We also need to evolve a system of leadership selection and accountability which produces the sort of leaders that will confront the challenges of the environment in a way that is beneficial for nation-building.

v. As we have argued at the beginning, nations are a product of the human will and imagination and the institutions that sustain their collective efforts. Therefore, we must find these resources in ourselves if we are to succeed in building our nation; otherwise, to paraphrase Shakespeare, “default would be not in our styles but in ourselves”.

vi. It is worthy of note that we must do away with the feeling of diversity and ethnic cleavages and worship that exist in our minds. The 'Wall' and the 'Bridge' they both exist in the hearts of men.

vii. While we should learn from history so as not to repeat its mistakes, we must never see ourselves simply as victims of our history; it is our responsibility to overcome the challenges posed by our history. The task starts with 'de-orientation', orientation and 're-orientation' of every member of the society; beginning from the home to schools, churches, mosques, political parties, pressure groups etc.
REFERENCES
ABSTRACT
This study considers the carbon emissions, energy consumption, economic growth and other determinants relationship in Nigeria using annual data over the period 1970-2017. For this purpose, ARDL bounds test approach to co-integration, Error Correction Model (ECM) for short run dynamics and Granger Causality Test have been applied. According to empirical analyses, carbon emissions per capita, energy consumption per capita, real GDP per capita, trade openness and urbanization are co-integrated. The estimated long-run income elasticity of carbon emissions per capita is 1.17 and the income elasticity of energy consumption per capita is 10.28. Results for the trade openness and urbanization show 0.74 and 3.67 while, in the short-run income elasticity of carbon emissions was found to be lower with a value of 0.11, which implies lower carbon emissions in Nigeria. In addition, estimated error correction model revealed that the speed of adjustment to restore equilibrium is -0.095 which confirms stable long-run relationship in the Nigeria case. Estimation shows unidirectional causality running from energy consumption and trade openness to carbon dioxide emissions, from trade openness to energy consumption, from carbon dioxide emissions to economic growth, and from Urbanisation to energy consumption in Nigeria. The overall results indicate that energy policies that would improve the energy infrastructure to create sufficient energy supply should be encouraged.

Keywords: CO₂ emissions, energy consumption, Output growth, ARDL bounds test

JEL Classification: Q43, Q53, Q56

1. Introduction
Overtime, studies have shown that increases in the volume of greenhouse gases emissions poses a major threat to global warming and climate change and as such it has being a major on-going concern for all countries of the world (Chen and Huang, 2013). Increase in output growth of countries implies an intensive use of energy as a means of input requirements in production and other natural resources; this implies more residues and wastes being thrown in the nature that could lead to environmental degradation. Therefore, governments at all level are faced with options of choosing between economic growth and environmental protection as global warming alters the ecology system of human societies.

Carbon dioxide (CO₂) is regarded to be the main source of green house effect and has captured great attention in recent years. Most of the CO₂ emissions come from fossil fuels consumption such as coal, oil, gas and electricity; the main power of source of automobile and industrial input that are directly linked with economic growth and developments. Although the nature of the relationship that existed among CO₂ emissions, energy use and economy growth has been empirically debated in most of the recent energy literature, however, there is no consensus. In these literature, three major strands are prominent about this relationship (Ali and Ozturk, 2010). The first argues in favour of environmental pollutants and economic growth nexus which are closely related to testing the validity of the so called environmental Kuznets curve hypothesis, which is the main focus of authors, such as Grossman and Krueger (1991), Shafiq (1994), Heil and Selden (2001), Friedl and Getzner (2003), Dinda and Coondoo (2006) among others. In these studies, the specification of environmental Kuznets curve hypothesis, depicts emissions as a function of income and as such unidirectional causality is usually observed to runs from income to emissions.

The second strand focuses on energy consumption and output nexus while introducing other determinant variables. In this area of focus are authors like Kraft and Kraft (1978), Masih and Masih (1996), Yang (2000), Narayan and Singh (2007), Narayan and Russell (2008), Wolde-Rufael (2009) among others, who suggested that economic development and output may be jointly determined, because economic growth is closely related to energy consumption as higher economic development requires more energy use (Ali and Ozturk, 2010; and Hossain, 2012).
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The third and most recent strand of researcher dwells on output growth-environmental pollution-energy consumption nexus. Authors (Richmond and Kaufman, 2006; Ang, 2007; Soytas, Sari and Ewing, 2007; Zhang and Cheng, 2009; Halicioglu, 2009; Apergis and Payne, 2009; Akbostanci, Turut-Asik and Tunc, 2009; Tamazian and Rao, 2010; and Uddin and Wadud, 2014 among others) around this area combine the two earlier approach with different methodological techniques to underscore the dynamic interrelationships between economic growth, environmental pollution and energy consumption by combining them in a single multivariate framework.

Despite several research undertaken up till date, the strength of the findings has been questioned - which can be partly attributed to different sets of econometrics methodologies adopted and quality of data in such studies. Previous studies estimation techniques include the Ordinary Least Squares (OLS), Vector Error Correction (ECM) and Vector Auto-regression (VAR). However, the uses of these techniques does not capture both long and short run together in a single model that assumed different stationarity conditions. Our study employed the Autoregressive Distributed Lag (ARDL) co-integration test. The uniqueness of this methodology over other time series approach lies in its ability to capture both long and short-run relationships in a single equation with a mixture of I(0) and I(1) data.

Therefore, the objective of this study follows the third strand of argument by underscoring both the short and long-run relationships and dynamic interactions of CO₂ emissions, energy use and growth, while also investigating the effect of other determinants like Trade openness and urbanization in Nigeria between 1970 and 2017.

To the best of our knowledge, there is no such study that uses these variables in the same framework for the country studied in this paper. This attempt and thus, understanding the nature of the bond among CO₂ emissions, energy consumption and economic growth has a great implication for policy-makers decision about the appropriate strategies and policies to adopt for economic growth and energy development especially in Nigeria.

Pertinent to the above, this current study improves on previous studies by estimating the Autoregressive Distributed Lag (ARDL) co-integration test popularly known as the bound test to shows the long-run relationships and dynamic interactions of CO₂ emissions, energy consumption, economic growth and its determinants. In this paper effort were geared towards examining the short-run and long-run relationships among CO₂ emissions, energy consumption and economic growth for Nigeria over the period 1970-2017, using Autoregressive Distributed Lag (ARDL) approach to co-integration and error correction model (ECM).

Following the introductory section, the rest of the paper is organized into seven sections as follows: the next section, section two provides stylized facts on energy consumption, carbon emissions and growth in Nigeria. Sections three, four and five illustrate with relevant literature review, the econometric methodology and data sources for the study, respectively. While section six entails the results and discussions of findings, section seven, the last section, focuses on the conclusion and policy implications of the study.

**Brief Stylised Facts on Energy Consumption, Carbon Emissions (CO₂) and Growth**

Premised on the data obtained from the World Development Indicator, for Nigeria; the economy, has witnessed up and down turn growth (measured by GDP per capita) over the years. Beginning with a GDP per capita of $1700 in 1970, it rose to $2058 in 1980. By year 2000, the figure increase marginally to $1382 approximated.

Asik and Tunc, 2009; Halicioglu, 2009; Apergis and Payne, 2009; Tamazian and Rao, 2010; and Uddin and Wadud, 2014 among others) around this area combine the two earlier approach with different methodological techniques to underscore the dynamic interrelationships between economic growth, environmental pollution and energy consumption by combining them in a single multivariate framework.

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**Table 1: Carbon Emission, Energy Consumption, GDP Per capita and Urbanisation (1970-2017)**

<table>
<thead>
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<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>0.38</td>
<td>0.75</td>
<td>0.93</td>
<td>0.84</td>
<td>0.41</td>
<td>0.33</td>
<td>0.62</td>
<td>0.76</td>
<td>0.58</td>
<td>0.57</td>
<td>0.57</td>
<td>0.57</td>
</tr>
<tr>
<td>Energy</td>
<td>594.1</td>
<td>608.4</td>
<td>665.1</td>
<td>682.8</td>
<td>697.1</td>
<td>682.2</td>
<td>703.2</td>
<td>757.9</td>
<td>755.9</td>
<td>775.2</td>
<td>779.0</td>
<td>779.1</td>
</tr>
<tr>
<td>Trade</td>
<td>57.1</td>
<td>41.17</td>
<td>48.57</td>
<td>50.39</td>
<td>39.93</td>
<td>49.00</td>
<td>33.06</td>
<td>43.32</td>
<td>43.32</td>
<td>21.45</td>
<td>20.72</td>
<td>26.35</td>
</tr>
<tr>
<td>Urban</td>
<td>17.76</td>
<td>19.78</td>
<td>21.97</td>
<td>25.64</td>
<td>29.68</td>
<td>32.21</td>
<td>34.84</td>
<td>39.07</td>
<td>47.84</td>
<td>48.68</td>
<td>49.52</td>
<td>49.52</td>
</tr>
</tbody>
</table>

Sources: Same as Figure 1. Note: CO₂ emissions is measured in metric tons per capita; Energy use is in kg of oil equivalent per capita; GDP is in constant 2010 US$, Trade is in % of GDP and Urban population (% of total).
In Nigeria, per capita energy use as at 2010 was approximately 756kg oil equivalent only which is less than 50% of the world average of 1680kg oil equivalent according to Islam, Islam, and Beg, (2008). Furthermore, since 1970, the energy consumption (Kg) oil equivalent per capita has witness a continuous growth in trend up till 2010 when it recorded a sharp decline and the figure had being fairly stable around 770kg oil equivalent (See, figure 2 below). In terms of carbon emissions, a critical examination of the Table 1 above showed that Carbon emission figure was relatively higher in the 1980 up till 1985 before fluctuations set in during the 2000’s. Specifically, CO2 emissions figure was 0.38 metric tons per capita in 1970 during which the economy recorded an output growth rate of 30.8%, with highest CO2 emissions recorded in 1980. Figure 1 below present the trends in the emissions.

To have a glimpse into the relationship of Energy consumption and growth, Figure 2 further provides a more direct view of the energy-growth-carbon association by plotting the per capita GDP growth against the energy consumption per capita and carbon emission in Nigeria from 1970 to 2017. A perusal of the Figure reveals a direct relationship between economic growth and energy consumption per capita in Nigeria. That is, high growth periods witnessed a simultaneous higher energy use, while lower emission witness lower GDP per capita. In addition to this visual inspection, the study also carried out an empirical investigation to ascertain the relationship between energy consumption and economic growth in Nigeria.

![Figure 2: Analysis of Energy Consumption and GDP per capita in Nigeria (1970-2017). Source: World Bank’s Development Indicators (WDI, 2014)](image)

### 2. Literature review

Both renewable and non-renewable energy play an important role in modern societies; as suggested by growth theories. Growth hypothesis predicts that energy consumption in form of coal, electricity, gas and petroleum resources used are indispensable component in growth by serving as input in production process. To this end, different methodological approaches ranging from macro-econometric to micro-econometric approach have been employed in testing the relationship among energy consumption, CO2 emissions and output growth. For, example, using a panel Vector Error Correction (VEC) model and decoupling theory, Lean and Smyth, (2010); Ru, Chen and Dong (2012); Chen and Huang (2013) and Wang, Kuang, Huang and Zhao, (2014) empirically investigated the relationship between CO2 emissions and economic growth using different countries data. Their findings suggested a positive long-run relationship among CO2 emissions, energy consumption and economy growth. Ru, Chen, Liu, and Su, (2012) investigated the driving forces of carbon dioxide emissions, they found that with the evolutionary process of carbon dioxide emissions driven by technical advances over time, decoupling phenomenon in carbon dioxide emissions intensity, carbon dioxide emissions per capita, and total carbon dioxide emissions would appeared in turn.

Uddin and Wadud (2014), focused on the causal relationship between CO2 emissions and economic growth in seven SAARC countries using time series data for the period of 1972-2012. While employing Vector Error Correction Modeling (VECM) and Johansen’s co-integration, they found co-integration relationship between
environmental pollution and economic growth and their results shows that the estimated coefficients of emissions have positive and significant impacts on GDP. Hossain, (2012) employed ARDL co-integration approach and VEC model to determine the long run relationship among his choice variables, for the period 1960 to 2009. Results showed that Short-run unidirectional causalities are found from energy consumption and trade openness to carbon dioxide emissions, from trade openness to energy consumption, and from carbon dioxide emissions to economic growth. He also found evidence for long run relationship among variables.

Behnaz, Jamalludin and Saidatulakmal, (2012) used Auto Regressive Distributed Lag (ARDL) model and Granger causality test to examine the relationship between economic growth and carbon dioxide (CO2) emissions for Malaysia. They found evidence for long-run relationship between per capita CO2 emissions and real per capita GDP with inverted-U shape relationship between CO2 emissions and GDP in both short and long-run. In that paper, there was no evidence of causality between CO2 emissions and economic growth in the short-run while demonstrating unidirectional causality from economic growth to CO2 emissions in the long-run. Tiari (2011) in an attempt to re-examines the relationship between energy consumption, CO2 emissions and economic growth in India employed VAR framework. Employing time series data from 1971 to 2007, he found that energy consumption, capital and population Granger-cause economic growth and that CO2 emission has positive impact on both energy use and capital but negative impact on population and GDP. He advised that policies that discourage the uses of non-renewable energy should be implemented as the causality test shows that energy consumption increases CO2 emission.

Balachandra et al. (2010) investigate that India has made substantial progress in improving energy efficiency which is evident from the reductions achieved in energy intensities of GDP to the tune of 88% during 1980–2007. Parikh et al., (2009) investigate the CO2 emissions of the Indian economy based on Input–Output (IO) table and Social Accounting Matrix (SAM) for the year 2003–2004 that distinguishes 25 sectors and 10 household classes. According to him, total emissions of the Indian economy were estimated to be 1217 million tons (MT) of CO2, of which 57% is due to the use of coal and lignite. The per capita emissions turn out to be about 1.14 tons.

In summary, results and arguments from the empirical literature have been mixed. Specifically, studies such as Soytas et al. (2007) and Sari and Soytas (2009) found uni-directional Granger causality running from energy consumption to pollution emissions in the long run, while Halicioglu (2009) found bi-directional causality both in the short and long-run between economic growth and pollution emissions. Also, Zhang and Cheng (2009) found uni-directional causality running from economic growth to energy consumption and energy consumption to pollution emissions in the long run, while Ang (2007) found uni-directional Granger causality running from economic growth to energy consumption and pollution emissions in the long-run. Pertinent to the above, some authors like Akarca and Long (1980); Yu and Hwang (1984); Yu and Choi (1985); Erol and Yu (1987); Stern (1993); and Cheng (1995); among others; have found no causality linkage between energy consumption and economic growth among countries.

Therefore, this current study follows that of Acaravci and Ozturk, (2010); and Arouri, Youssef, M'henni and Rault, (2012) to examine the relationship between CO2 emissions, energy consumption and output growth. However, this study makes additional contribution by incorporating other determinant variables like Urbanization and trade openness. This is done to show the important of urbanization and trade openness on CO2 emission, energy consumption and growth, as each one in turn play a crucial role in determining the level of economic activities in an economy. Studies such as Anderson, Quigley and Wilhelmson (2009); Martinez-Zarzoso, and Maruitti, (2011) and Grossman and Krueger (1991) have also showed the importance of urbanization and foreign trade and other determinant variables in underscoring the relationship under study.

This study employed the Autoregressive Distributed Lag (ARDL) co-integration test popularly known as the bounds test to shows the long-run relationships and dynamic interactions of economic growth and its determinants. The uniqueness of this methodology over other time series approach lies in estimating both long-run and short-run relationships in a single equation; when we have a group of time-series, some of which may be stationary, while others are not.

3. Methodology
The estimated model used in this study is stated as:

\[ PGDP_t = (CO2_t, EU_t, OPEN_t, URT) \] ................. (1)

Where PGDPt refers to per capita real GDP (PGDP) (constant 2000 US$), and CO2t is the carbon emissions (measured in metric tons per capita), EUt is the energy use (kg of oil equivalent per capita), OPENt is the
trade openness and URT refers to urbanization. The co-integration techniques suggested by Pesaran, Shin, and Smith, (2001), the autoregressive distributed lag model (ARDL) is used. This method can be adopted regardless of whether the variables are integrated of order (1) or (0) and compare to other multivariate co-integration methods such as Johansen and Juselius (1990). ARDL is a simple technique that allows the co-integration relationship to be estimated in a single equation specification; once the lag order of the model is identified. Therefore, from equation (2), the ARDL estimable model is specified as:

\[ \Delta \text{PGDP}_t = \alpha_0 + \sum_{i=1}^{p1} \Delta \text{PGDP}_{t-i} + \sum_{i=1}^{p2} 2\text{CO}_2{t-i} + \sum_{i=1}^{p3} 3\text{EU}{t-i} + \sum_{i=1}^{p4} \text{OPEN}{t-i} + \sum_{i=1}^{p5} \text{UR}{t-i} + \alpha_1 \Delta \text{PGDP}_{t-1} + \epsilon_t \]  

(2)

Where PGDP, CO\(_2\), EU, OPEN and UR are as defined before and \( \Delta \) is first differencing operator while, \( t \) is the white noise disturbance error term. The ARDL bounds test approach for the long-run relationship between Carbon emissions and it’s other determinants; was based on the Wald test (F statistic), by imposing restrictions on the long-run estimated coefficients of one period lagged level of per capita GDP, energy consumption, trade openness and urbanization to be equal to zero, that is, \( H_0: \beta_1=\beta_2=\beta_3=\beta_4=\beta_5=0 \) for equation 2. According to Pesaran et al. (2001), the explanatory variables are assumed to be integrated of order zero, or I(0) for values of the lower bound, while the upper bound values assumed that they are integrated of order one, or I(1). The decision rule is that if the computed F-statistic exceeds the upper bound value, \( I(1) \) then it can be concluded that Carbon emissions and its determinants (under equation 2) are stable and co-integrated. Contrarily, if computed F-statistic falls below the lower bound value, \( I(0) \), the null hypothesis (no co-integration) cannot be rejected.

The bounds specification of short run dynamics is then estimated using Error Correction Model (ECM) of the following form:

\[ \Delta \text{PGDP}_t = \alpha_0 + \sum_{i=1}^{p1} \Delta \text{PGDP}_{t-i} + \sum_{i=1}^{p2} 2\text{CO}_2{t-i} + \sum_{i=1}^{p3} 3\text{EU}{t-i} + \sum_{i=1}^{p4} \text{OPEN}{t-i} + \sum_{i=1}^{p5} \text{UR}{t-i} + \alpha_1 \Delta \text{PGDP}_{t-1} + \epsilon_t \]  

(3)

From equation 3, the one-time lagged residual term \( ECT_t \) depicts the disequilibrium in the long run relationship and \( \alpha_1 \) reflect the rate of change of each variable in equation (3). Also, the Granger causality test suggested by Engle and Granger (1987) and goodness of fit for the bounds is checked through stability tests such as cumulative sum (CUSUM) and cumulative sum squares (CUSUMSQ). Thus, this representation can be used to examine both the short and long-run relationship between the macroeconomic indicators. Consequently, equation (3) also indicates the output growth influenced as explained by its past values and other shocks.

Data Sources

Using annual time series data that cover the period from 1970-2017 to re-examine the link under study, variables such as CO\(_2\) emissions (CO\(_2\)) (metric tons per capita), Energy use (EU) (kg of oil equivalent per capita), per capita real GDP (PGDP) (constant 2000 US$) which is used as the proxy for economic growth, trade openness (OPEN) (% of exports and imports of GDP) which is used as the proxy for foreign trade, and urbanization (UR) (% of urban population) are all sourced and computed accordingly from the World Bank’s Development Indicators (WDI – version, 2019). All variables were transformed into the natural logarithmic form to reduce heteroskedasticity.

4. Results and Discussions

Table 2, reported the descriptive statistics for variables employed in the analysis, it is found that variability is highest for economic growth and Energy consumption, but lower for trade Urbanisation, trade openness and CO\(_2\) emissions.

<table>
<thead>
<tr>
<th></th>
<th>LEU</th>
<th>LNC02</th>
<th>LOPEN</th>
<th>LPGDP</th>
<th>LUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>6.544</td>
<td>-0.497</td>
<td>3.413</td>
<td>25.926</td>
<td>3.414</td>
</tr>
<tr>
<td>Median</td>
<td>6.542</td>
<td>-0.440</td>
<td>3.562</td>
<td>25.733</td>
<td>3.448</td>
</tr>
<tr>
<td>Maximum</td>
<td>6.682</td>
<td>0.010</td>
<td>3.976</td>
<td>26.864</td>
<td>3.902</td>
</tr>
<tr>
<td>Minimum</td>
<td>6.361</td>
<td>-1.123</td>
<td>2.212</td>
<td>25.279</td>
<td>2.877</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.084</td>
<td>0.317</td>
<td>0.474</td>
<td>0.479</td>
<td>0.310</td>
</tr>
<tr>
<td>Skewness</td>
<td>-0.476</td>
<td>-0.516</td>
<td>-1.162</td>
<td>0.794</td>
<td>-0.154</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.547</td>
<td>2.235</td>
<td>3.476</td>
<td>2.236</td>
<td>1.819</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>2.220</td>
<td>3.298</td>
<td>11.254</td>
<td>6.211</td>
<td>2.977</td>
</tr>
<tr>
<td>Probability</td>
<td>0.329</td>
<td>0.192</td>
<td>0.004</td>
<td>0.045</td>
<td>0.226</td>
</tr>
<tr>
<td>Sum</td>
<td>314.127</td>
<td>-23.846</td>
<td>163.832</td>
<td>1244.466</td>
<td>163.892</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>0.328</td>
<td>4.727</td>
<td>10.566</td>
<td>10.797</td>
<td>4.519</td>
</tr>
</tbody>
</table>


Pesaran et al. (2001) critical values are based on the assumption that the variables are integrated of order I(0) or I(1). Unit root tests insure that none of the series is integrated of I(2) or higher. The time series properties of the variables employed in this study are evaluated by conducting Augmented Dickey-Fuller (ADF) and Philips-Perron (PP) unit root tests as suggested by both Dickey and Fuller (1979) and Phillips and Perron (1987). The results of the unit root tests are presented in Table 2. Test for stationarity shows that all variables are integrated of order I(1) and thus, stationary in difference.

Table 3: UNIT ROOT TESTS RESULTS

<table>
<thead>
<tr>
<th>Variable</th>
<th>ADF</th>
<th>PP</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂</td>
<td>-2.519526</td>
<td>-2.674312</td>
</tr>
<tr>
<td>1st Difference</td>
<td>-7.059987*</td>
<td>-7.195587*</td>
</tr>
<tr>
<td>PGDP</td>
<td>-5.960910*</td>
<td>-6.067488*</td>
</tr>
<tr>
<td>1st Difference</td>
<td>-10.98381*</td>
<td>-16.24119*</td>
</tr>
<tr>
<td>EU</td>
<td>-2.514689</td>
<td>-2.530037</td>
</tr>
<tr>
<td>1st Difference</td>
<td>-5.549541*</td>
<td>-5.552632*</td>
</tr>
<tr>
<td>OPEN</td>
<td>-2.576136</td>
<td>-2.568279</td>
</tr>
<tr>
<td>1st Difference</td>
<td>-6.395256*</td>
<td>-6.398137*</td>
</tr>
<tr>
<td>UR</td>
<td>-2.191444</td>
<td>-2.432242</td>
</tr>
<tr>
<td>1st Difference</td>
<td>-3.681829**</td>
<td>-3.860745**</td>
</tr>
</tbody>
</table>

Note: * and ** denote 1%, and 5% significant level respectively, the optimal lag structure is determined by SIC. Source: Author’s Estimation

The empirical result from the bounds test co-integration for Nigeria is presented in table 4 below. The result revealed that the computed F-Statistic of 6.349 from the estimation of the Wald test exceeds both the upper bounds critical values for 5% level of significance (4.57) and 1% significant level (5.72). Therefore, the bounds F-test for co-integration test yields evidence of a long-run relationship between real GDP per capita, carbon emissions per capita, energy consumption per capita, trade openness and urbanization at both 5% and 1% significant level in Nigeria.

Table 4: Bounds Testing for Co-integration Analysis

Computed F-Statistic: 6.349 (SIC Lags = 2)

<table>
<thead>
<tr>
<th>Bounds level:</th>
<th>Lower I(0):</th>
<th>Upper I(1):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1% critical bounds value</td>
<td>4.40</td>
<td>5.72</td>
</tr>
<tr>
<td>5% critical bounds value</td>
<td>3.47</td>
<td>4.57</td>
</tr>
</tbody>
</table>

Notes: Asymptotic critical value bounds are obtained from Table C1 (iii) Case III: unrestricted intercept and no trend for k = 4 (Pesaran, et. al 2001, p300).

The long-run estimated log-linear coefficients are shown in the Table 5 below. As can be seen, the log-linear coefficient of Carbon emissions per capital is positive at 1.170 and the estimated log-linear long-run coefficient of energy consumption per capita is negative at 10.277. The first coefficient refers to the elasticity of carbon emissions per capita and thus, an increase in carbon emissions per capital will increase the real GDP per capita at the rate of 12% in Nigeria. This result support the EKC hypothesis – inverted U put forward by Grossman and Krueger (1995) and named as the EKC by Panayotou (1993). This result is similar to the findings of Saidi and Hammami (2015), where evidence support a positive link between economic growth and CO₂ emissions.

The elasticity of energy use per capita coefficient showed that an increase in energy consumption per capita will decrease real GDP per capita at a higher rate. From the results also, the estimated log-linear long-run coefficient of trade openness and urbanization show a positive significant value of 0.736 and 3.671 in Nigeria.

Table 5: Estimated UECM for Nigeria Economic Growth Function from Equation (2)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO₂</td>
<td>1.170*</td>
<td>0.367</td>
<td>3.189</td>
<td>0.003</td>
</tr>
<tr>
<td>EU</td>
<td>-10.277***</td>
<td>5.406</td>
<td>-1.901</td>
<td>0.065</td>
</tr>
<tr>
<td>OPEN</td>
<td>0.736***</td>
<td>0.403</td>
<td>1.826</td>
<td>0.076</td>
</tr>
<tr>
<td>UR</td>
<td>3.671**</td>
<td>1.624</td>
<td>2.261</td>
<td>0.029</td>
</tr>
</tbody>
</table>
C  | 59.597**  | 28.272  | 2.108  | 0.042  
Source: Authors’ Estimation from E-views 9. Note: (*)&  | (***) indicates 1%, 5% and 10% significant level respectively, $R^2 = 0.976$; Adj $R^2 = 0.972$; DW Stat = 2.567; Prob (F-Stat) = 0.000

The estimated error correction model (ECM) was reported in Table 6. The short-run coefficients are less than the long-run ones. The estimated ECT is also negative (-0.095) and statistically significant at 5%. This corroborates the existence of a stable long-run relationship and points to a long-run co-integration relationship among variables. ECT indicates that a deviation from the long-run equilibrium between variables is corrected by approximately 9.5% after each year. Thus far, the estimated results show that GDP per capita has both short run and long run relationship on energy consumption and carbon emissions in Nigeria. In addition, figure 3 and 4 presents the plot of cumulative sum (CUSUM) and cumulative sum of squares (CUSUMSQ) test statistics that fall inside the critical bounds of 5% significance. This implies that the estimated parameters are stable over the period of (1970-2017).

The diagnostic tests also confirm that the estimated model satisfied all the required properties. The residual series are normally distributed as suggested by the Jarque–Bera statistics; the model has no serial correlation as indicated by the Breusch–Godfrey LM test; and the residuals are homoscedastic as suggested by the ARCH test. Moreover, the Ramsey RESET test shows that the model is well specified with the correct functional form.

**Table 6: Error Correction representation for the selected ARDL model**

<table>
<thead>
<tr>
<th>Coefficient Form</th>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>D(CO2)</td>
<td>0.111*</td>
<td>0.040</td>
<td>2.743</td>
<td>0.009</td>
<td></td>
</tr>
<tr>
<td>D(EU)</td>
<td>-0.974*</td>
<td>0.265</td>
<td>-3.677</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>D(OPEN)</td>
<td>0.069*</td>
<td>0.017</td>
<td>4.059</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>D(UR)</td>
<td>-3.175</td>
<td>3.512</td>
<td>-0.904</td>
<td>0.372</td>
<td></td>
</tr>
<tr>
<td>D(UR(-1))</td>
<td>6.444**</td>
<td>2.683</td>
<td>2.402</td>
<td>0.021</td>
<td></td>
</tr>
<tr>
<td>CointEq(-1)</td>
<td>-0.095**</td>
<td>0.039</td>
<td>-2.457</td>
<td>0.019</td>
<td></td>
</tr>
<tr>
<td>Breusch-Godfrey Serial Correlation LM Test</td>
<td>2.436(0.102)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heteroskedasticity Test: ARCH</td>
<td>0.453(0.505)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ramsey Reset Test</td>
<td>1.931(0.159)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jarque–Bera</td>
<td>0.539(0.763)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Authors’ Estimation from E-views 9. Note: (*), (**) and (***) indicate 1%, 5% and 10% significant level respectively.

**Granger Causality Test**

The results of the pair wise Granger causality test are presented in Table 7 below. The F-Statistic test and the P-value are used to examine the direction of any causal relationship between the variables. The result reveals that the null hypothesis that energy consumption does not Granger-cause CO$_2$ emissions at the five per cent level is rejected. This demonstrates that Energy consumption actually causes CO$_2$ emissions in Nigeria. However, the other null hypothesis that CO$_2$ emissions do not Granger-cause energy consumption cannot be rejected even at the ten per cent level. The results indicate that there is a unidirectional causality moving from Energy consumption to CO$_2$ emissions, with no response from CO$_2$ emissions to energy consumption in Nigeria. Similar result is obtained for trade openness and urbanization and capita GDP to energy consumption.

However, the findings presented further indicated a bidirectional causality running from urbanization and energy consumption and trade openness and CO$_2$ emissions. Thus, supporting the ECM and long-run relationship among the variables in Equation (3) and the results of the bounds test.
### Table 7: Pair wise Granger Causality Tests

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>F-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>LNCO2 does not Granger Cause LEU</td>
<td>0.346</td>
<td>0.559</td>
</tr>
<tr>
<td>LEU does not Granger Cause LNCO2</td>
<td>4.022</td>
<td>0.051**</td>
</tr>
<tr>
<td>LOPEN does not Granger Cause LEU</td>
<td>2.804</td>
<td>0.101</td>
</tr>
<tr>
<td>LEU does not Granger Cause LOPEN</td>
<td>1.020</td>
<td>0.318</td>
</tr>
<tr>
<td>LPGDP does not Granger Cause LEU</td>
<td>3.174</td>
<td>0.082***</td>
</tr>
<tr>
<td>LEU does not Granger Cause LPGDP</td>
<td>0.420</td>
<td>0.520</td>
</tr>
<tr>
<td>LUR does not Granger Cause LEU</td>
<td>3.537</td>
<td>0.067***</td>
</tr>
<tr>
<td>LEU does not Granger Cause LUR</td>
<td>13.986</td>
<td>0.001*</td>
</tr>
<tr>
<td>LOPEN does not Granger Cause LNCO2</td>
<td>0.014</td>
<td>0.906</td>
</tr>
<tr>
<td>LNCO2 does not Granger Cause LOPEN</td>
<td>1.840</td>
<td>0.182</td>
</tr>
<tr>
<td>LPGDP does not Granger Cause LNCO2</td>
<td>0.841</td>
<td>0.364</td>
</tr>
<tr>
<td>LNCO2 does not Granger Cause LPGDP</td>
<td>1.061</td>
<td>0.309</td>
</tr>
<tr>
<td>LUR does not Granger Cause LNCO2</td>
<td>3.238</td>
<td>0.079***</td>
</tr>
<tr>
<td>LNCO2 does not Granger Cause LUR</td>
<td>30.277</td>
<td>0.000*</td>
</tr>
<tr>
<td>LPGDP does not Granger Cause LOPEN</td>
<td>0.062</td>
<td>0.805</td>
</tr>
<tr>
<td>LOPEN does not Granger Cause LPGDP</td>
<td>1.346</td>
<td>0.252</td>
</tr>
<tr>
<td>LUR does not Granger Cause LOPEN</td>
<td>0.036</td>
<td>0.850</td>
</tr>
<tr>
<td>LOPEN does not Granger Cause LUR</td>
<td>16.633</td>
<td>0.000*</td>
</tr>
<tr>
<td>LUR does not Granger Cause LPGDP</td>
<td>1.225</td>
<td>0.274</td>
</tr>
<tr>
<td>LPGDP does not Granger Cause LUR</td>
<td>0.663</td>
<td>0.420</td>
</tr>
</tbody>
</table>

Source: Authors’ estimate from E-views 9. **Note:** (*), (**) and (***) indicates 1%, 5% and 10% significance level respectively.

This study and its outcome are better placed among other empirical results such as Ozturk and Acaravci, (2010); Acaravci and Ozturk (2010); and Soytas et al. (2007) but different from that of Halicioglu (2009); Hossain, (2012) and Uddin and Wadud, (2014). Thus far, the overall estimated results show that energy conservation policies; such as rationing energy consumption, increase in urban centers, trade openness and controlling carbon emissions, are likely to have no adverse effect on the real output growth in Nigeria.

**Figure 3: Stability test, Recursive Estimates (OLS) CUSUM Test**
5. Conclusions

This study query the long-run and short-run relationship between Carbon emissions, energy consumption, economic growth and its determinants in Nigeria using annual data for the period of 1970-2017 applying the UECM-Bounds test proposed by Pesaran et al. (2001) and the Error Correction Model (ECM). Results showed that carbon emissions per capita, energy consumption per capita, trade openness, urbanization and real GDP per capita are co-integrated. Estimating error correction model revealed that the speed of adjustment to restore equilibrium is -0.095 which confirms stable long-run relationship. Specifically, the results support the EKC hypothesis for Nigeria. The elasticity of energy use per capita coefficient showed that an increase in energy consumption per capita will decrease real GDP per capita. From the results also, the estimated log-linear long-run coefficient of trade openness and urbanization show a positive significant value of 0.736 and 3.671 in Nigeria. The diagnostic tests also confirm that the estimated model satisfied all the required properties. The residual series are normally distributed as suggested by the Jarque–Bera statistics; the model has no serial correlation as indicated by the Breusch–Godfrey LM test; and the residuals are homoscedastic as suggested by the ARCH test. Moreover, the Ramsey RESET test shows that the model is well specified with the correct functional form.

The result reveals that the null hypothesis that energy consumption does not Granger-cause CO₂ emissions at the five per cent level is rejected. This demonstrates that Energy consumption actually causes CO₂ emissions in Nigeria. However, the other null hypothesis that CO₂ emissions do not Granger-cause energy consumption cannot be rejected even at the ten per cent level. The results indicate that there is a unidirectional causality moving from Energy consumption to CO₂ emissions, with no response from CO₂ emissions to energy consumption in Nigeria. Similar result is obtained for trade openness and urbanization and capita GDP to energy consumption. However, the findings presented further indicated a bidirectional causality running from urbanization and energy consumption and trade openness and CO₂ emissions.
Thus, policy makers are required to implement policies that would improve the energy infrastructure to create sufficient energy supply; since, rapid pace of carbon emissions requires alternative sources of energy for the protection of environment.

REFERENCES


EFFECT OF RESOURCE BASED AND INSTITUTIONAL INDUCED ENTRY STRATEGIES ON THE PERFORMANCE OF INTERNATIONALIZED NIGERIAN INSURANCE COMPANIES

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Abstract
The financial reform of insurance subsector has been an ongoing process, not only in Nigeria but world over. Prior to the recapitalization of the insurance financial subsector in Nigeria in 2005, the insurance industry was hitherto characterized by inadequate capital base, dearth of appropriate human capital and general poor performance. The sector has since grown to the extent of going international, in terms of their operational base. This study examines the effect of resource base induced entry strategy and institutional induced entry strategies on the international performance of Nigerian internationalized insurance companies. The study employed survey research design, a total of 106 management staff selected from ten Nigerian internationalized insurance companies, were used for the study. Data was collected using structured questionnaire in likert format. The questionnaire was given to experts for inputs, pilot tested and Cronbach alpha was used to test the reliability of the instrument. The reliability coefficient was found to be 0.86, which indicated that the instrument is reliable. The findings revealed that both resource base induced entry strategy and institutional induced entry strategies positively and significantly affect the performance of Nigerian internationalized insurance companies. It is concluded that resource base induced entry strategy and institutional induced entry strategies are the major drivers of insurance companies’ international performance. It can therefore be recommended that insurance companies that seek to internationalize should adopt resource base entry strategies and institutional entry strategies, as there tend to enhance the performances of the internationalized Nigerian insurance companies, at the international market.

Keywords: Internationalization, Insurance Companies, Entry Strategy, Resource Base, Institutional Induced

1. Introduction
Several factors account for internationalization of firms in different sectors of the economy. Some of the factors include firm structure, strategies, orientations, capabilities, environmental exigencies, need for expansion, profitability and international entrepreneurship orientation (IEO). Financial sector is the nucleus of all productive activities of every economy. It consists of network of institutions ranging from banks, insurance companies, among others, which has been driven by structural and institutional reforms overtime (Ogujiuba & Obiechina, 2011). The insurance sub-sector of the financial
service sector has been evolving over the years in Nigeria that culminated into the present status of the insurance industry, in Nigeria. It is worthy of note that, no insurance company shall carry out insurance business in Nigeria, unless the insurer has and maintains a paid-up share capital. The amounts payable before the successful re-capitalization of the insurance sector in the year 2005, include:(i) Life assurance business, not less than N150,000,000, (ii) General insurance business not less than N200,000,000; (iii) Composite insurance business not less than N350,000,000. It must be clearly accentuated that the successful recapitalization of the Nigerian banks in 2004, has in no small measure propelled the National Insurance Commission (NAICOM) to come up with insurance sub-sector reforms in the year, 2005, which led to the increase in the capital base of insurance companies from the range stated above, to now reflect as follow: (i) Life assurance - 2 billion, (ii) General - 3 billion and (iii) composite insurance - 5 billion in that order. The national insurance commission has the power and mandate, among other things, to cancel the registration of any insurer or re-insurer that fails to meet up with the requirements or violates any of the provisions of the insurance act. The insurance sub-sector performs significant economic roles in the Nigerian economy, through efficient diversification of risks (Ahmed, 2016). The 2005 insurance reforms in Nigeria was equally carried out among other things to increase shareholder value, ensure greater efficiency of operations and provide the insurance companies with the requisite capacities to underwrite high risks (Epetimehin, 2013). A lot of studies have been carried out in the different spheres of entry modes strategies or choices of firms. Adeleye and Iheanacho (2014) investigated the entry mode strategies and internationalization processes of three Nigeria firms, namely, Guaranty trust Bank, Oando (petroleum) and Globacom (Telecommunications) respectively. The methods of data collection were through survey and the use of secondary data sources. Findings revealed that the three firms involved were all in the early stages of internationalization processes. There largely made use of the Uppsala theory model in their entry strategies. All the firms sought to leverage the locally developed core competencies abroad, by venturing, first into countries with geographical, cultural, economic and administrative proximity to Nigeria, like Ghana and Benin Republic. A Comparison of these Nigerian firms to other firms in the Countries with emerging economies shows that the Nigerian firms have quickly moved up towards wholly owned investments market entry strategies with boldness.

Altuntas (2012) studied the effect of entry mode and internationalization on home market performance, using survey data and financial statement data of German insurance groups. Findings corroborated the notion and showed that the establishment of branch offices as well as deeper internationalization of firms’ operation is positively correlated with home market performance. However, studies on insurance firms’ international expansion through resource based and institutional induced entry strategies and performances of internationalized Nigerian insurance companies are curiously very scarce at the local level and beyond. This gap was originally suggested as an area for further research by Onafowora and Owoye (2006), Brother and Hennart (2007) as well as Awolusi (2013). Therefore, this study seeks to examine the influence of resource base induced entry strategy and institutional processes of internationalization of insurance companies as well as their performances at the international market level, by examining two theoretically based entry strategies of institutional theory and resource based theory respectively. This study was guided by three basic objectives; to examine the effect of resource-based induced entry mode of the internationalized Nigerian insurance companies and their subsequent performances, and also, the examination of the effect of institutional induced entry modes and the performances of internationalized Nigerian insurance companies, lastly, the investigation of the combine effect of resource base and institutional induced entry mode decisions, on the international performances of the Nigerian insurance companies.

2. Conceptual Review of Literature

Insurance Firms in Nigeria:

Insurance industry is one of the major players in the financial service sector of the Nigeria economy. Chukwulozie, (2008) defines insurance firms as belonging to a service delivery industry which exists mainly to provide the insure public with a system of protection against any financial loss, arising from accidental and unexpected events. It is equally aimed at restoring confidence of the public in the market and enhances the international competitiveness of the local operators. Awori, (2000) opines that insurance is a tool by which individuals and corporations are able to guard against risks and uncertainties that face the daily operation of their businesses.

It enables investors to undertake ventures that they would not ordinarily go into, due to the fear of huge risks involvement. According to the recent NAICOM statistics and directory publication, there are 59 insurance companies that are registered in Nigeria, having satisfied the prescribed requirements for registration and operation. The new capital base and other statutory requirements have equally enhanced
the capacity and the performances of Nigerian insurance companies. However, 12 (twelve) insurance
companies were issued licenses by NAICOM to internationalize their operations, which gave them the
authority and wherewithal to seek for opportunities outside Nigeria, in the year 2012, Nnabugwu, (2012).
The total number of Nigerian insurance companies that have foreign subsidiaries has since grown to
Table 1: Nigerian Insurance Company and their Foreign Countries of Operation

<table>
<thead>
<tr>
<th>S/N</th>
<th>INSURANCE</th>
<th>FOREIGN COUNTRIES OF OPERATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Industrial &amp; General Insurance PLC</td>
<td>Uganda, Rwanda and Gambia</td>
</tr>
<tr>
<td>2</td>
<td>Nicon Insurance PLC</td>
<td>Sao Tome and Principe, Ghana and UK</td>
</tr>
<tr>
<td>3</td>
<td>NSIA</td>
<td>Ghana, Cameroon, Congo, Gabon Benin, Cote’d Voire, Guniea, Guniea Bissau, Mali, Togo and Senegal</td>
</tr>
<tr>
<td>4</td>
<td>Law union &amp; Rock Insurance</td>
<td>Partnership with (African Re) in Morocco, Cote’d Voire, Kenya Mauritius, Uganda, South Africa and Egypt</td>
</tr>
<tr>
<td>5</td>
<td>Standard Alliance Insurance</td>
<td>Kuala Lumpur and Uganda</td>
</tr>
<tr>
<td>6</td>
<td>Cornerstone Insurance PLC</td>
<td>Partnership with (African Re) in Morocco, Abidjan, Kenya Mauritius, Uganda, South Africa and Egypt</td>
</tr>
<tr>
<td>7</td>
<td>Regency Alliance Insurance PLC</td>
<td>Ghana</td>
</tr>
<tr>
<td>8</td>
<td>Sahara Unitrust Insurance Nigeria</td>
<td>Montreal Canada, partnership with (African Re) in Morocco, Abidjan, Kenya Mauritius, Uganda, South Africa and Egypt</td>
</tr>
<tr>
<td>9</td>
<td>Nem Insurance PLC</td>
<td>Ghana</td>
</tr>
<tr>
<td>10</td>
<td>Prudential Zenith Life Assurance</td>
<td>Ghana and London</td>
</tr>
<tr>
<td>11</td>
<td>SUNU Assurance Nigeria PLC</td>
<td>Ghana</td>
</tr>
<tr>
<td>12</td>
<td>Old Mutual Nigeria General Insurance Company Limited</td>
<td>South African, Malawi, Namibia and India</td>
</tr>
<tr>
<td>13</td>
<td>Mutual Benefits Assurance PLC</td>
<td>Liberia and Niger</td>
</tr>
<tr>
<td>14</td>
<td>Wapic Insurance PLC</td>
<td>Ghana</td>
</tr>
<tr>
<td>15</td>
<td>African Alliance Insurance</td>
<td>Acquired (Ghana) Life Insurance Company</td>
</tr>
<tr>
<td>16</td>
<td>Capital Express Insurance</td>
<td>Ghana, Kenya Liberia and Sierra Leone</td>
</tr>
<tr>
<td>17</td>
<td>Universal Insurance PLC</td>
<td>Partnership with (African Re) in Sierra Leone and</td>
</tr>
<tr>
<td>18</td>
<td>FBN</td>
<td>Partnership with (South Africa) Salam group</td>
</tr>
<tr>
<td>19</td>
<td>International Energy Insurance</td>
<td>Partnership with (Insurance firms) of Cameroon, Gambia, Ghana, Gabon, Tunisia and Uganda</td>
</tr>
<tr>
<td>20</td>
<td>Continental Re-Insurance PLC</td>
<td>Cameroon, Abidjan Tunis, Nairobi and Botswana</td>
</tr>
</tbody>
</table>

Source: Authors compilation from the insurance companies’ website

Entry Mode (EM)

International market entry modes by firms have been the subject of many academic studies and of several research works too. The firm process of expansion into international markets is characterized by several key strategic decisions. These range from motivation (why), and it continues with the selection of the target market (where), to the entry mode choice (how) and with the adaptation of the company to a new international environment (host country). Czinkota (2004) noted that there are a number of proactive and reactive motivations for firms to internationalize their operations.

The proactive motives emerge when firms possess a profit advantage, unique products, technological advantage, exclusive information, tax benefit and economies of scale. Reactive motivations are forced on the firm due to competitive pressures in the domestic market, overproduction, declining domestic sales, excess capacity, saturated domestic markets and proximity to customers and following clients to the international terrain.

Essentially, firms can be said to expand internationally, in order to: (i) Exploit market opportunities (ii) Achieve economies of scale and geographic scope (iii) Exploit their core competences and resources in new markets (iv) Source for lower cost of supplies, labour, innovation and other inputs in their value chain (v) And diversification of risk. The world is said to be a global village, if not a global neighborhood, so also we have a global market and with this, comes global competition. This means that many more companies are deciding to go into new markets continuously (Porter 2004), and this new global challenge of competition demands the right type of entry mode action to be successful.

Foreign Market Entry Mode Strategies (FMES)

The selection of an accurate target market and the right international marketing strategy is not only an important assignment, but at the same time a difficult task. It is important because the success or failure of
going international of a firm, for new markets strongly depends on it. The best strategy for building up new markets and the best market entry project plans are useless if the wrong markets are targeted, even with the presence of appropriate market entry strategies Grünig and Morschett (2017). The different market entry strategies that firms adopt include; exporting, licensing, franchising, foreign direct investment (FDI) (wholly-owned subsidiary, joint venture) among others. FDI is the major foreign entry mode adopted by Nigerian financial service sector (Amungo, 2016; Eze, 2018, Oladimeji, Abosede & Eze, 2018), Harrison (2011) opines that FDI entails some level of equity ownership on the part of the foreign investor, more importantly, it requires some degree of management control and this distinguishes FDI from foreign portfolio investment (FPI). The latter entails the acquisition of share or other financial assets without having control over the management of the firm. FDI includes; wholly owned subsidiary and joint venture. Wholly-owned subsidiary refers to the total control of a foreign firm, it could be attained either through the establishment of a foreign subsidiary (often called a Greenfield) or through the acquisition of a foreign firm (often referred to as a Brownfield). A Joint venture is an agreement, entered into by two or more autonomous organizations that agree to come together, sharing revenues and costs, as well as the control of the new firm; it involves an agreement with a foreign partner (Hill, 2007).

**Performance of Internationalized Insurance Firms:**
According to Milliman (2002) describes international performance management as the process which allows international companies or multinational enterprises to evaluate and constantly improve individual and corporate performance in relation to pre-set goals and targets. It helps to identify strengths, weaknesses, opportunity and threats as well as the evaluation of training needs, or gaps and the anticipated future development. Harzing & Ruyssetveldt (2004) defines the concept of performance as two processes of observation and judgment through the evaluation and development of performance. It is a strategic process that helps to continuously improve global operations through their employees, by matching up to certain pre-set objectives.

**Perceived International Business Performance Measures (PIBPM)**
Firms’ performance has been measured through various indices, some scholars measure firm performance through financial performance indicators (Goosen, Coning & Smit, 2002; Adele, 2015) while others employed non-financial performance measure (Abosede, Eze & Sowunmi, 2017), a combination of financial and non-financial performance measures was suggested by Kaplan and Norton (1996). However, in measuring firms’ international performance, Dess and Robinson (1984) developed the Perceived international business performance measure (PIBPM), which refers to management perceived satisfaction with foreign operations as well as improved foreign sales. Dess and Robinson (1984) opine that perceived measures can replace objective measures of international business performance. Furthermore, Lyles and Salk (1996) found that the reliabilities and correlations between objective measures and perceived measures are strong. Additionally, firms usually have defined goals prior to internationalization processes; it therefore becomes appropriate for the management to compare the expected outcome with the actual outcome. Awolusi (2013) posits that PIBPM may be a more realistic measure of international performance. This study employed PIBPM in measuring international performance of insurance companies in Nigeria.

**Theoretical Review**
In the quest of an enhanced understanding of the determinants of the international expansion of firms, scholars have propounded some theories to clarify the process. This particular study adopted and adopted the resource-base theory and the institutional theory respectively.

**Resource Base View Theory (RBV)**
This theory deals with heterogeneity of capabilities and resources in a population of a firm, as the centre and cornerstone of resource-based theory (Peteraf, 1993). A firm’s resources are all “those tangible and intangible assets which are tied semi permanently to the firm.’ (Wernerfelt, 1984). The resource-base view theory also known as resource advantage theory postulates that firms are able to leverage unique, valuable and rare resources for competitive advantage (Barney, 1991). According to the resource based theorists, resources and capabilities include; tangible and intangible resources, which could be physical, human and organizational assets, knowledge about investment instruments, quantitative models, that can be used to implement value-creating resources for competitive advantage. For insurance companies, prompt claim settlement, managerial know-how, brand name, size and organizational culture are some of the assets that can confer competitive advantages and aid firm’s international expansion. The resource based theory suggests and advocate the adoption of foreign direct investment (FDI) as the preferred entry strategy to maintain control over resources.
If a firm holds the ability to implement a value creating strategy, to establish a situation to be ahead of its competitors, then, a competitive advantage may yield systematic superior returns (Wernerfelt, 1984; Schoemaker, 1990). It is noteworthy that this is only possible, if a company is able to advantageously exploit its competitive advantage, in order to cement its lead and create a situation where other firms are unable to catch up and duplicate the benefits of this market strategy, then, this competitive advantage will be taken to be sustainable and profitable.

**Institutional Theory (IT)**
The institutional theory postulates that the institutional environment of the host country and it differences with the home country affects firms’ market entry decisions, because the environment reflects the regulations by which firms participate in a foreign market (Brouthers and Hennart, 2007). The theory suggests that, in a favorable host institutional environment, high stake commitment market entry mode should be employed, i.e., (FDI), while in an unfavorable host institutional environment, low stake commitment entry mode should be employed (exporting, licensing, franchising), in order to mitigate the inherent liabilities of foreign market operations.

**Research Hypotheses**
The researcher built two of the hypotheses on resource-based view arguments and one institutional induced entry strategy because the consideration of foreign market environments would exceed the desired simplicity of theoretical framework alone.

- **Ho1**: Resource bases induced entry strategy does not significantly affect Nigerian insurance companies’ international performance.
- **Ho2**: Institutional induced entry strategy does not significantly affect Nigerian insurance companies’ international performance.
- **Ho3**: Resource bases and institutional induced entry strategy do not significantly affect Nigerian insurance companies’ international performance.

**Conceptual Framework**

![Conceptual Framework Diagram]

**Source:** Researcher, 2019

The conceptual framework proposes that a combination of resource base and institutional induced entry strategies will enhance the internationalized Nigerian insurance firms’ performance significantly.

**3. Methodology**
The study is a survey research design. Survey method is employed when a researcher aims at gathering information from a given sample and to investigate the interactions of relevant variables in the study. The target population of the study is all the internationalized insurance companies in Nigeria. Ten (10) internationalized insurance companies were randomly selected out of the internationalized insurance companies in Nigeria. Structured questionnaire was used to collect data from 106 management staff of the Nigerian internationalized insurance companies (11 from each of the six insurance companies, and 10 each,
from the remaining four insurance companies). The study adapted the questionnaires used by Dess and Robinson (1984) and Awolusi (2013). A 4-point likert scale with responses structured as strongly agree (4), agree (3), disagree (2), strongly disagree (1) was stated on the instrument so that the respondents can indicate their levels of agreement or disagreement with regards to each of the statements expressed.

The instrument was validated by some academics in the field of international business. A pilot study was conducted through test re-test method to ascertain the extent of reliability of the instrument, which gave a Cronbach alpha of 0.86, which indicated that the instrument is reliable. The instrument was administered personally by the researcher and data collected was analyzed using regression analysis.

**Model Specification**

The theories underpinning the model for this study are institutional and resource based theories.

\[
\text{INTPERF} = f(\text{RBV}, \text{INS}) (i)
\]

\[
\text{INTPERF} = \beta_0 + \beta_1 \text{RBV} + \beta_2 \text{INS} + \mu (ii)
\]

Where:

- INTPERF represents International Performance
- \(\beta_0\) is the constant term
- \(\beta_1, \beta_2\) are the coefficient of the estimator.
- \(\beta_1, \beta_2 > 0\)
- RBV and INS are resource base view and institutional induced entry strategy respectively.
- \(\mu\) is the error term

The a priori expectation is such that resource based view and institutional induced entry strategy are expected to positively affect Nigerian insurance companies’ international performance; hence, the parameters of resource based view and institutional induced entry strategy should have a positive sign.

### 4. Findings and Discussions

**Table 1: Table of regression analysis using stata version 14**

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>Coefficient</th>
<th>T-statistics</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>3.00</td>
<td>7.95</td>
<td>0.00</td>
</tr>
<tr>
<td>R</td>
<td>2.92</td>
<td>4.91</td>
<td>0.00</td>
</tr>
<tr>
<td>I</td>
<td>3.60</td>
<td>8.50</td>
<td>0.00</td>
</tr>
</tbody>
</table>

F-Statistics = 54.98 (0.0000)  R-Square = 0.6904  Adj R-Square= 0.6652

Table 1 above revealed that both resource base induced entry strategy and institutional induced entry strategies have individual positive and significant effect on the international performance of Nigerian internationalized insurance companies, with coefficient and probability value of RBV (0.2928, P<0.05), INS (0.3608, P<0.05). However, institutional induced entry strategy has the most effect on the international performance of internationalized Nigerian insurance companies with a coefficient of 0.3608626. Furthermore, both resource base view induced entry strategy and institutional induced entry strategies account for 66% variation in the international performance of internationalized Nigerian insurance companies. The F-statistics result of 54.98 (P<0.05) resource base induced entry strategy and institutional induced entry strategies have combined positive and significant effect on the international performance of Nigerian internationalized insurance companies.

### 5. Conclusion and Recommendations

The study examines the effect of resource base induced entry strategy and institutional induced entry strategy on the performance of Nigerian internationalized insurance companies. The findings revealed that both resource base induced entry strategy and institutional induced entry strategies positively and significantly affect the international performance of Nigerian internationalized insurance companies. The result also showed that institutional induced entry strategy has the most significant effect on the international performance of internationalized Nigerian insurance companies. Furthermore, both resource base induced entry strategy and institutional induced entry strategies account for 66% variation in the international performance of internationalized Nigerian insurance companies.
Resource based induced entry strategy and institutional induced entry strategy facilitates performances of internationalized Nigerian insurance firms. It is concluded that resource base induced entry strategy and institutional induced entry strategies are the major drivers of insurance companies’ international performance. It is therefore recommended that insurance firms that seek to internationalize their market operations should adopt resource base entry strategy and institutional entry strategies respectively, as this tend to enhance their international performance. Further studies can be carried out by incorporating other international business theories and other data collection method, like interview, as this may yield more outcomes.

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THE ROLE OF DIGITAL DIVIDE TO INFORMATION PROFESSIONALS IN AN INFORMATION SOCIETY

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ABSTRACT
Every profession in the human history has its origin, prospects and challenges; it is the desire of every member of the professional body to seek solutions to the problems militating against their successful journey in the society. Digital divide has been identified as one of the alarming issues of the 21st century. Information and communication technology influences every major aspect of our life including the way we learn. ICT may be a disabler for many who either don’t have access to these resources or don’t know how to use new technology in a public space. The role of information professionals are bound to change along with technological advancements in the world. This paper examines the concept of digital divide, the role of information professionals and the way forward to bridging the gap in digital divide.

Keywords- Digital Divide, Information Professionals, Libraries, Nigeria, Information Society

INTRODUCTION
Information is a crucial part of human existence. It is so essential to all aspects of our lives that we literally cannot afford to manage it badly. Individuals and organizations rely on their ability to select and process information, in order to make sense of their local environment and try to understand the larger society. Bentley (2013) observes that Information is the foundation of every organization and those with accurate, reliable and timely information has an advantage over competitors.

An information society is such where the creation, distribution, use, integration and manipulation of information have become the most significant economic and cultural activity. An Information Society may be contrasted with societies in which the economic underpinning is primarily industrial or agrarian are a significant economic, political, and cultural activity. The machine tools of the Information Society are computers and telecommunications, rather than lathes or ploughs. Information society is seen as the successor to industrial society. Bell (1973) and Castells (1998) described it as the post-industrial society and post-Fordism, post-modern society, knowledge society, telematics society, Information Revolution, liquid modernity, and network society respectively. Webster (2004) distinguishes five definitions of an information society, each of which suggests that humans are entering a new phase of society. These are technological, economics, spatial, cultural, and occupational definitions of the information society.

The world has moved from the 'Industrial Age' into the 'Information Age/Society. The world now boasts of a knowledge-based and information driven economy. The concept of the Information Age/Society epitomizes the changes brought about by technological advances and globalization toward the end of the 20th Century (Oladele, 2008). Although interest in the concept of society as information society dates back to the 1960s (Bell, 1969) it virtually exploded during the 1990s. Initially much of the impetus for this widespread manifestation of national Information Society initiatives was explicitly economic or industrial (Brazil, Ministry of Science and Technology 2001).

There is currently no universally accepted concept of what exactly can be termed information society and what shall rather not so be termed. It has been employed variously as a social, cultural, economic and technical concept. There remain differences between those who would view it as representing epochal type change (ITU 2002) and perceive the emergence of different types of networked informational societies (Castells 2000), and those who maintain that there is no novel, postindustrial society, and that changes in occupational and industrial structures simply reflect continuity with the past (Webster 1995).Moreover, for all those who proclaim the Information Society as providing the answer to social inequality, poverty and unemployment, there are others who would regard it as likely to widen the gap between information haves and have nots and to maintain existing socioeconomic disparities (Sarker 2001). This divergence
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in perspective has led to calls for a unitary theory of the Information Society, one that balances the manifold elements of information (Duff 2001) and it also recognizes the need to address issues of disadvantage and inequality, issues that can be characterized in terms of the Digital Divide.

**THE CONCEPT OF DIGITAL DIVIDE**

The concept of the digital divide is becoming more and more complex as access to computers and the use of computers, changes over time. When the existence of digital divide first emerged, it revolved around access to computers and related technologies. The high cost of computers creates a large divide between people who could afford them and who had access to all the advantages of a computer and those who could not. As a result, the digital divide was further defined around social/political issue referring to the socio-economic gap between communities that have access to computers and the Internet and those who do not. The term also refers to gaps that exist between groups regarding their ability to use Information and Communication Technologies (ICTs) effectively, due to differing levels of information literacy and technical skills, as well as the gap between those groups that have access to quality, useful digital content and those that do not.

There are several definitions of the term; Mehra (2002) defines it simply as the troubling gap between those who use computers and the Internet and those who do not. More recently, some have used the term to refer to gaps in broadband network access. The term can mean not only unequal access to computer hardware, but also inequalities between groups of people in the ability to use information technology fully. Given the range of criteria used to access the various technological disparities between groups/ nations and lack of data on some aspects of usage, the exact nature of the digital divide is both contextual and debatable. Digital divide refers to the gap between people with effective access to digital and information technology and those with very limited or no access at all. It includes the imbalance both in physical access to technology, the resources and skills needed to effectively participate as a digital citizen. Knowledge divide reflects the access of various social groupings to information and knowledge, typically gender, income, race and by location.

The Digital Divide has been described by the United Nations as a factor of exclusion from global exchange processes, restricting the development of intellectual capital, slowing down economic growth and dangerously increasing the lack of understanding between cultures and civilizations (UNDSF, 2005). The term "digital divide" was coined in the mid-1990s by an anonymous source and was made popular in 1996 with the Telecommunication Act (Van Dike, 2006). Servon (2002) argued that the digital divide is a symptom of a larger and more complex problem than of persistent poverty and inequality. Mehra (2002) identifies socio-economic status, income, educational level and race among other factors associated with technological attainment or the potential of the Internet to improve everyday life for those on the margins of society and to achieve greater social equity and empowerment.

The conclusion from the various existing definitions of the digital divide is that the nature of the divide and the question on whether it is closing or widening, depends on the particular definitions chosen. Based on the theory of the diffusion of innovations through social networks, a common framework can be set up to distinguish the main approaches researchers have taken to conceptualize the digital divide. All kinds of studies and approaches to the digital divide can be classified into these four categories namely:

1. Level of analysis: Individuals versus organizations
2. Attributes of nodes and ties: Income, education, geography, age, gender, or type of ownership, size, profitability, sector, etc
3. Digital sophistication: Access versus usage
4. Type of technology: Phone, internet, computer etc.

**FACTORS RESPONSIBLE FOR DIGITAL DIVIDE**

According to DiMaggio (2001) governments and researchers thought that the Internet and the World Wide Web would actually enhance equality of information access because they thought that the cost of information would now be reduced. However, they began to realize that the information divide was actually growing.

DiMaggio (2001), stated in his study, “for the most part, group with higher levels of access to the Internet were the same groups (white men, residents of urban areas) that had greater access to education, income and other resources that help people get ahead”. After this recognition of inequality, an explosion of surveys and studies from both the public and private sectors sprung up in an effort to find the cause and solution to this growing problem. There began a recognition and understanding that the gap itself is self-perpetuating. The concept of self-perpetuation is important to keep in mind when addressing solutions to the digital
Inequality of Information access has existed throughout time. This inequality of information access has been referred to by many names including the "knowledge gap", "anticipation in the information society", "the digital divide" and more recently, "computer literacy". Some of the factors responsible for digital divide include:

ACCESS: Access to technology is further divided within the information society according to socio-economic status. The upper socio-economic statuses have access to technology at home. Whereas the lower socio-economic are limited to technology access at home. With this limited access to ICT, there will be a continuous digital divide among members of the society. The difference is not necessarily determined by access to the Internet, but by access to Information and Communication Technology (ICT) and to media that the different segments of the society can use. Access to information on the web is restricted in specific ways even though there are high degrees of freedom relative to date, time and intensity. Researchers report that access can take such forms as lower performance computers, lower quality or high price connections (i.e. narrowband or dialup connections), difficulty of obtaining technical assistance and lower access to subscription based contents.

LITERACY: This is one of the major factors affecting digital divide in developing countries like Nigeria. Developed countries have a low rate of illiteracy, therefore, the gap between the users of ICT and the non-users is often lower than in developing countries. Digital literacy is the ability to identify, search and utilize required information in multiple formats from a wide range of sources presented through information and communication technologies. CILIP (2014) opined that digital literacy is one of the core skills required for digital inclusion.

National statistics indicate that the more education a person has, the more likely he/she is able to use the Internet. The educational attainment divide is a self-perpetuating one in that the more education a person has, the more likely she will benefit from ICT which in turn increases benefits from increased ICT.

AFFORDABILITY: A survey by Research ICT Africa (2014) disclosed that 70% of non-internet users in Nigeria say affordability is the main reason for not using the internet. Majority of internet users in Nigeria access it exclusively using mobile devices. Smart phones and tablets have become very popular in Nigeria. The cost of ICT services is a major barrier to increase internet and broadband usage. Nigeria cannot boast of free Wi-Fi to enable internet access; and internet speeds are particularly slow.

LANGUAGE: Nigeria is a multi-lingual state; some of her citizens can only write and speak in local languages other than English. Most, if not, all of the ICT facilities imported into Nigeria are configured in English Language. Consequently, these people are digitally excluded.

DISPARITY BETWEEN URBAN AND RURAL AREAS: According to TERPIN, rural areas in Nigeria constitute about sixty percent of the country's habited land space. These parts of the country are adjudged economically underdeveloped as they are plagued with poor infrastructure, hence the continuous migration of persons in the productive age bracket from the rural to urban areas in Nigeria. Considering the development advantage that ICT offers, those who are on the disadvantage side of the digital divide will remain digitally excluded and underdeveloped.

Other factors that cause digital divide include
- Attitudes and cultural influence,
- Inadequate fund,
- Inadequate power supply
- Inadequate professionals in information service delivery
- Unfavorable policies in government and education sector

ROLES OF INFORMATION PROFESSIONALS IN AN INFORMATION SOCIETY

Change is the major factor of human life. There is great importance to change in the present era and it is the cause of human progress. The Library and Information Science profession is no exception to this. Rubin (2004: 79) observes that "the scope and rapidity of change within our profession has never been as great as it is now and the growth of electronic information technologies has challenged [the role of libraries] and resulted in considerable instability and uncertainty among librarians.” Thompson (2009) provides an overview of the changes in libraries related to technology in the last five decades and explains the present situation as being different from the past because of three factors: the pace of changes in technology, the breadth of technological tools that are involved in the job of a librarian, and the depth of technical knowledge expected of librarians in the 21st century. Thomason (2009) further states that the librarian’s job has become more challenging and requires librarians to be information technology (IT) experts.

Today, librarians are expected to be aware of a wide variety of tools, proficient at troubleshooting, able to create content using IT, and able to change rapidly with the technological environment of their users. Librarians are discovering that their IT departments are no longer able to handle all of the demands.
stemming from the many different types of technology now available in the area of library and information science. Therefore, librarians are increasingly expected to provide some level of technology support for themselves. Libraries have traditionally played a key role in providing access to information and disseminating it across the community. That role has now extended to include facilitating access to innovative technologies (Thompson, 2009). As a result of change, new concepts are coming up. In the age of information society, the task of fulfilling the reader’s expectations depend upon the skillful librarian.

Competencies are human behaviors (skills) that lead to successful performance in the organization, these competencies are essential library profession. It is important to note that librarians and other information professionals in the organization could contribute to the knowledge roles and responsibilities by having the right competencies and skills. Choo (2000) suggested that information professionals need to understand what knowledge is, what the nature and structure of organization knowledge is and what distinguishes it from other forms of knowledge. In this way information professionals will have to change and develop in a way that will affect their new roles and responsibilities.

According to Gautam, (2014) some of the roles of information professionals include among others:

ACCESS: information professionals can open access to the web through working information Centre by providing people with the access to internet resources. In effect, the information centers/libraries are connected to the internet so that the users can go online and gain access to their local and international website or any other website that meets their needs.

TRAINING AND EDUCATION: information professionals can help working class citizens get more comfortable and skilled with using computers and surfing the world wide web through regular training and exposure to ICT and digital resources.

Education: information professionals can provide adult education program as literacy classes. Help those working class citizens to get online to use the web through access for those without computers; training and encouraging them get over fears of using new technology.

PROFESSIONAL FUNCTIONS OF LIBRARIANS

Every profession is set up to carry out certain tasks in order to benefit human race. Thus, librarianship profession is a laudable profession that benefits the human race in so many important areas; hence, it performs the following tasks so as to contribute positively to the growth and development of the community where it is sited; the librarians’ functions discussed in this paper are adapted from www.liasa.org.za/sites/de...librarianship/2003:

1. Selection and acquisition of information sources relevant to the needs of the user community
   In any human society, information is very crucial; it facilitates development in every facet of human endeavors. Information is very broad and complex; hence, relevant information has to be selected and acquired in order to effectively minister to the information needs of various information seekers in the society. Therefore, librarians has to take cognizance of the information needs of his users before selecting and acquiring relevant information resources to satisfy their informational needs.

2. Organization and management of the information sources and facilities so that the collections are accessible to the users
   For information to be easily accessible and useful to any information seeker in the human society, such information has to be systematically organized and professionally managed by the librarians. Information has to be classified using a standard scheme in accordance to the subjects it treats. Thus, the following schemes could be used to classify information resources in different libraries: Library of Congress Classification scheme (commonly used in the Academic libraries); Dewey Decimal Classification Scheme (commonly used in Public and School libraries); Colon Classification scheme; Bliss Classification scheme; Universal Decimal Classification scheme (all are commonly used in Special and Private Libraries). With these schemes, librarians could effectively organized library resources so as to enhance their easy accessibility.

3. Dissemination of information to the users
   Librarians can effectively disseminate information to their users through: selective dissemination of information (SDI), open access publications; physically displaying information materials on the library shelves for outright consultation; charging and discharging of information resources for further consultation at the users’ convenient time and locations.

4. Facilitating access to information in print and electronic formats
   Librarians do facilitate easy access to the educational resources kept in the library by providing bibliographic details of each library material on 3x5” cards and arranged them alphabetically on the public catalogue; thus, library arranges the bibliographic description of its resources in author/title, subject and classified catalogues respectively so as to give easy access to its holdings and thereby “saves the time of readers” (Ranganathan, 1963). Also, library provides Online Public Access Catalogue (OPAC); an electronic
format for the accessibility of the library collections. Besides, it provides shelf guides for those books arranged on each library shelf so as to give physical/easy access to them.

5. Creating and managing digital collections in institutional repositories

An Institutional Repository (IR) is an online archive for collecting, preserving, and disseminating digital copies of the intellectual output of an institution, particularly a research institution (Crow, 2006; Harnard, 2005; Wikipedia, 2014). An institutional repository can be viewed as a "...a set of services that a university offers to members of its community for the management and dissemination of digital materials created by the institution and its community members (Lynch, n.d). For a university, this includes materials such as monographs, academic journal articles, both before (preprints) and after (post prints) undergoing peer review, as well as electronic theses and dissertations (ETDs). Also, it consists of digital assets generated by academics, such as administrative documents, course notes, learning objects, or conference proceedings. Deposit of material in an institutional repository is sometimes mandated by that institution (Wikipedia, 2014). Some of the main objectives for having an institutional repository are to provide open access to institutional research output by self-archiving it, to create global visibility for an institution’s scholarly research, and to store and preserve other institutional digital assets, including unpublished or otherwise easily lost (“grey”) literature such as theses or technical reports.

6. Electronic resources management

These include managing licensing agreements and facilitating access to electronic databases journals and books. In most Academic libraries, examples of electronic resources include: Ebscohost, Mylibrary, Jstor, Science direct, Agora and others. All these provide immediate and current educational materials to the library users. With these online resources, information seekers can access information in any area of their needs and disciplines; they can equally access collections that are stored by the library at their convenience without necessarily visiting the library for their various information needs.

OVERCOMING DIGITAL DIVIDE IN NIGERIA

Librarians and Information professionals with ICT skills are viewed as agents of knowledge transfer and advocate for information accessibility. According to Brophy (2001) 21st century libraries and information professions are facing at least three major paradigm shifts:

I. The transition from paper to electronic print

II. Increasing focus on customers, performance measure, benchmarking and continuous improvement being an economic resource as well as sharing knowledge

III. The third shift comes from new form of work organization such as end-user computing, work teams, outsourcing, downsizing and re-engineering Kenney. The author went further to capture the essence of shifts in the libraries, their programs and the functions with the following assertion: “Yesterday's libraries were all about books, tomorrow’s libraries will be all about readers”, “Yesterday’s libraries were all about getting information, tomorrow’s libraries will be all about creating and sharing information”.

In 21st century library, there is a paradigm shift from traditional library to digital library, library co-operation to resources sharing network/consortia; technology application is the major driving force which enhances e-learning, open access and open sources, information literacy, knowledge management and knowledge repository. The 21st century library must be “library without walls” in which collections do not exist on paper, microform or other tangible form at a physical location alone [Reitz, 2005] rather collection is replaced with e-books-journals, and internet. 21st century library must be electronically accessible in digital format via computer networks because access is no longer restricted to the user in terms of time and distance.

Scholars like Harkins (2000); Jensen (2001) indicate that a possible solution to bridging the digital divide maybe wireless phones. Wireless phones are changing our culture and the way we think about telecommunications. Access to the internet via mobile wireless technologies is becoming more and more of a viable option and more people can have access to the internet through their mobile phones or other wireless devices, than through traditional means. Bridging the digital divide gap we need policies that are pragmatic and can be implemented.

Public internet terminals can be shared amount community members. The internet terminals can be set up at strategic places like schools or community centers with customized options that are tweaked to the needs of each individual community. Whilst these are some of the ways to overcome the digital divide, the government needs to set up Telecenters or community center networks.

THE WAY FORWARD

Information professionals in Nigeria need to learn from other developed countries in overcoming digital divide. Practical examples can be seen in libraries of other countries
In Chile, the national digital literacy campaign was launched with the goal of training 500,000 Chileans in ICT by 2005, largely via a network of over 300 public libraries. So far thousands of Chileans have benefited from the program. The free training has helped Chileans launch businesses, navigate market information and develop technology skills to improve their job competitiveness.

In Uganda, Hoima public libraries are providing e-book content to borrowers to ensure that all Americans continue to have access to commercially produced content through their local public libraries.

In South Africa, public libraries provide space for information kiosks and tele-centres.

In Poland, Polish public libraries are able to offer their users free internet access.

In the United States, U.S public libraries are providing e-book content to borrowers to ensure that all Americans continue to have access to commercially produced content through their local public libraries. In 2012, public libraries reported that they were the sole provider of free public access to computers and the internet in 62.1% of communities in the United States.

Information professionals in Nigeria can emulate these other countries and try to bridge the gap between “haves” and “have not’s”. Librarians and information professionals’ role is critical in helping people locate, use, process, organize, create, communicate and manipulate information and information resources. The library is an institution of learning therefore, there must be an environment or forum that will train users on how to use ICT facilities and it must be through the information professionals. Informal one-on-one assistance from the libraries has the additional benefit of teaching basic computer skills in the context of the patron own search for information.

The National Knowledge Commission (2007) has made recommendations that all academic institutions must set up an international repository of ETD. This is to enable the library offer effective resource sharing network although there are certain efforts taken at the regional level as (ALIBNET, MALIBNET, ADINET, and PUNET) etc. libraries should continuously orient their users with modern information in having access to information and communication technology which can ultimately results in bridging the digital divide.

CONCLUSION

The information and knowledge based age, information service provision; access and utilization are more demanding than ever before. Libraries and library professionals need to be equipped with the latest technology and computer skills, training on software skills and e-networks. Infrastructures of the libraries need to be conducive for the users. There are various efforts by different world bodies and agencies to narrow the gap caused by ICT. The identity of information centers and information professional from geared towards providing solution created by the imbalance through the provision of access, digitalization of resources, education and training of both information professionals and the population. It is the duty of all to bridge the digital divide. Libraries should participate in local and national initiatives and discussions on internet policies, digital inclusion, broadband access and open data. Assistive technology should be provided in improving access for people with disabilities.

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INTERNATIONAL FINANCIAL REPORTING STANDARD (IFRS) AND SMALL AND MEDIUM ENTERPRISES (SMEs) GROWTH IN ONDO STATE, NIGERIA

BY

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Abstract
The main objective of this study is to examine the influence of International Financial Reporting Standard (IFRS) on Small and Medium-Scale Enterprises among the selected registered SMEs in Akure metropolis. The study adopted survey research design with the population of 142 (One Hundred and Forty Two) registered SMEs within Akure metropolis. The study employed Taro-Yamane sampling techniques to select the sample size of 105 (One Hundred and Five) registered SMEs under Small and Medium-Scale Enterprise Development Agency in Nigeria (SMEDAN) in Akure metropolis. Structured questionnaire was administered and returned by the respondents. Crombach Alpha reliability statistics was used to test the internal consistency. The estimated reliability test for all items was 0.874 which is above the 0.7 coefficient threshold. Data collected was analysed using t-test statistics to test the hypotheses at 5% level of significant. The study revealed that IFRS has significant influence on SMEs business in Akure metropolis. It also found that the businesses gained enormous benefits from IFRS. Based on these findings, the study therefore recommends that the National accounting Standard Board (NASB) should continue to sensitize SMEs stakeholders’ in order to know more about the financial reporting benefits. Also, government should mandate it compulsory for all SMEs business owners to implement IFRS for businesses.

Keywords: Financial Reporting Standard, Small Businesses and Innovation Diffusion.

1. Introduction
The prodigious furtive of any successful business in the world is for the owner to be ready when the opportunity comes. Therefore, small and medium enterprises (SMEs) have been generally acknowledged as the bedrock of the industrial development of any nation because of the numerous goods and service produced by SMEs. These form the integral part of a developed or developing economy. They are bound by statutory rules of a country in which they operate to prepare financial report that conform to specified set of accounting principles. These discussions and debates resulted in the quest of International Accounting Standard Board (IASB) for a set of standards for different enterprise depending upon the size. IFRS for SMEs was designed to guide small businesses all over the world, thereby bringing light to acumen and skills that are required to deal with contentious accounting vicissitudes in the 21st century. It is believed that persistent practice of IFRS will enhance comparability, transparency, universality, and production of high quality financial statements which will completely amend the structure of financial reporting. The last two decades have witnessed an increase wave of accounting issues such as financial statements fraud, weak corporate governance and risk management practices which gave rise to the 2008 global financial crisis in Nigeria (Bhasin, 2013).

Financial reporting inconsistencies has persisted due to varying reporting standards and requirements in different countries and as such posed great challenges to international investors (Pologeorgis, 2013). Corporate failures may occur because of the characteristics of businesses such as the size, age and their reported past successes that collapsed. These defines in the new discovery accounting practice were far more insidious and wide spread than previously envisioned (Bhasin, 2013). The emergence of IFRS is not
new in Nigeria, the need for a good financial reporting becomes paramount not only to corporate bodies but also to SMEs in order to have access on the major challenges faced by SMEs and other benefits enjoyed by big companies.

The recent paradigm shift in the world economy towards globalization has recently given rise to the clamor for a single standard in order to enhance the comparability of financial statements across the countries and to reduce investors’ uncertainty (Eniola, 2014). IASB in July, 2009 issued the IFRS for the SMEs in order to cater for financial reporting needs of these entities. The convolution and strain that could be faced by SMEs in the execution of the complete standards were been considered (IASB, 2009; 2010). Emeni (2014) observed that the benefits of high quality standards which should be derived from the practice of IFRS for SMEs such as relevance, reliability, and understandability will certainly ensure that users of financial information benefit from better decision making as well as restoring the confidence of investors in the aftermath of financial crises, which have damaged the credibility of audits and financial reporting.

However, other challenges including the cost associated with its training and continual usage, lack of technical skills of IFRS users that were prone to the manipulation of standards, complexity in the preparation of financial statement as IFRS does not consider local accounting standards. The study seeks to empirically examine the influence of IFRS on SMEs in Akure metropolis. It also evaluates the benefits derived by SMEs business owners in the preparation of their financial statements. These objectives fascinated the interest of the researchers to raise questions on how IFRS influences SMEs in Akure metropolis. What benefits do SMEs business owners derived in the area under study? These research questions lead to the formulation of the following hypotheses.

H01: There is no significant influence between IFRS and SMEs business enterprise
H02: There is no significant benefit derived by SMEs from IFRS

2. Theoretical Framework
The study embraced the highlighted theories. A theory is a belief, policy or procedure proposed or followed as the basis of action. Although, some researchers believed that there are theories generally accepted on financial reporting standards. Below are some of the theories that are specifically selected for this study.

2.1 Rational Choice Theory
The rational choice theory was originated in the late 18th century with the work of Cesare Beccaria. The theory assumed that the business owners could only adopt a standard that haveadd value to business rather than adopting a standard that have no influence on their business. These serve as enlightenment to other companies that do not know about the benefit of accounting standard (Emeni, 2014). Most businesses adopt IFRS when they realized that its benefits exceed the Nigerian Generally Accepted Accounting Principle (NG-GAAP). The theory suggests that an enterprise should determine the possible costs and benefits of any action before making decision on adoption of the standards. It also explores the actions and behavior of an individual or a company as rational in order to maximize one’s utility (Scott, 2000). However, rational choice theory attempts to explicate why companies do what they do? Whether to adopt IFRS for SMEs or domestic accounting standard for their businesses, this was in relation to the rational choice theory of economic benefits to be derived by the business on the proponents of IFRS. Barth, Landsman and Lang, (2008); Li & Meeks(2006) argue that the standards reduce information costs to an economy, as it will be cheaper for capital market participants to be familiar with one set of global standards.

2.2 Innovation Diffusion Theory
This theory was propounded by Everett Rogers by seeking how, why and at what rate the new ideas are communicated overtime. Mahajan and Peterson (1985) postulated that an innovation as any idea, object or practice that is perceived as new by an enterprises and delineated diffusion of innovation as the process by which the innovation is communicated through certain channels overtime among an enterprises. The diffusion of innovation theory tries to explain and describe the mechanism of how a new invention, such as International Financial Reporting Standards (IFRSs), its adoption and success. Sevck (2004) stated that not all innovations are adopted; even if they are good and it take a long time for an innovation to be adopted. He added that resistance to change may be an obstacle to diffusion of innovation. Although it might not stop the innovation, but it may slow it down. Diffusion scholars recognize five qualities that determine the success of an innovation (Rogers, 1995; Robinson, 2009).

The rate of adoption of IFRSs depends on how small business enterprises perceive these qualities such as relative advantage, compatibility, triability, observability and complexity. If an innovation has a higher relative advantage, it will rapidly be adopted. If it is perceived to be consistent with current values, past experiences, and needs of prospective adopters, it will be easier to adopt. The new ideas that are simple to
understand are rapidly adopted than which require the innovator to develop new skills and understanding and those that can be tried represent less uncertainty to the individual who is considering its adoption. As a result, this will evaluate and decide whether to adopt it or not.

2.3 Empirical Review

Numerous issues and challenges on the adoption of IFRS have been discussed by various scholars, Adetula, Owolabi and Onyinye (2014) empirically examined the Effect of IFRS on SMEs Adoption Process in Lagos State, Nigeria. The study found that IFSR for SMEs adoption process is currently faced with numerous challenges, it was also discovered that IFRS for SMEs is relevant to SMEs in Nigeria as small businesses in Nigeria stand to enjoy easy access to international investments and investors, bank loans, high rating by international credit rating agencies.

Abdulkadir (2012) concentrated on the Adoption process of International Financial Reporting Standards (IFRS) on a developing economy, with particular reference to Nigeria, descriptive survey design was applied and secondary data were collected. Finding carried out on the study indicated that conversion to IFRS in Nigeria is a huge task and a big challenge; its revolutionary impact requiring a great deal of decisiveness and commitment. It is in the best interest of Nigeria to adopt IFRS. Eniola (2014) on the role and contribution of SMEs performance in the national development of a developing country like Nigeria, the study shows that several policies directed at small and medium scale Enterprises development did not stand the test of time and while exploiting the economic potentials of SMEs in Nigeria is still a mirage as the program had constraints SMEs from deriving maximum benefits from them due to administrative bottlenecks on their performance.

Yahaya, Fagbemi and Oyeniyi (2015) on the Effect of International Financial Reporting Standards on the Financial Statements of Nigerian Banks, in their study found out that; Adoption of IFRS in Nigeria brings good and bad news. The overall good news is that the comparability of Nigerian financial statements internationally may improve since many other countries have already adopted IFRS. There are, however, a number of pitfalls lurking for financial analysts and other users of financial statements. In the short term, the outcome of trend analysis may be distorted as current IFRS statements are compared to pre-changeover NGAAP statements. In the longer term, it will be influenced by the application of IFRS which differs (to a larger or lesser extent) from that found in NGAAP.

3. Methodology

The research design embraced for this study was survey research design. Structured questionnaire was used to elicit information from the respondents. The population for this study comprises of 142 registered SMEs within Akure metropolis. A Taro-Yamane sampling technique was used to select the sample size for this study. Based on the number of registered SMEs, the study administered 105 questionnaires to selected registered SMEs which were categorized into 2 groups (Small and Medium-Scale Enterprises) using simple random sampling technique. The instrument was subjected to reliability test. The Crombach-Alpha type of reliability statistics was considered to test the reliability of the instruments. This was measured to determine the internal consistency of the items and revealed how homogenous the items in each sections are. The estimated internal consistency of the reliability for all items was .874. From the result presented, it was observed that all the research questions were reliable with the coefficient value of .874 which was higher than the threshold of .70. Thereby the instruments were accepted. Data collected were hypothetically analysed with the t-test statistics at 5% level of significance.

4. Results and Discussion

H₀₁: There is no significant influence between IFRS and SMEs

Table 1: t-test Statistical Analysis of the Influence of IFRS on SMEs

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>(2) Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>Influence of IFRS on SMEs</td>
<td>28.173</td>
<td>103</td>
<td>0.000</td>
<td>2.848</td>
<td>2.65</td>
<td>3.05</td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

Table 1 above indicated that the t-value of 28.173 and p-value of .000 at two tail test, tested at 5% level of significance with the mean value of 2.848 at 103 degree of freedom. Since the p-value is less than the t-value. The null hypothesis which states that there is no significant influence between IFRS and SMEs is hereby rejected. Thus, there is a significant influence between IFRS and SMEs. This was in line with IASB (2009) which issued the IFRS for SMEs in order to cater for financial reporting needs of these entities.
because of the intricacy and strain that could be faced by the SMEs owners in the preparation of financial statement. These IFRS came up to straightening the mode of reporting standard of SMEs. Above all, the indication here was that IFRS is pertinent to SMEs as small businesses stand to enjoy easy access to investments and financiers, bank loans, credit facilities. It also discovered that using a globally accepted financial reporting standard with the consensus of SMEs businesses owners in Nigeria will tame-tide their operating standard as they function in a globalized world. The preparers of financial reports of small businesses perceive IFRS for SMEs promulgated by the IASB to be very important to small businesses in Nigeria. These were in tandem with the findings of Bunea-Bontus and Petre (2010).

H_{02}: There is no significant benefit derived by SMEs from IFRS

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>t</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean Difference</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefit Derived by SMEs from IFRS</td>
<td>29.532</td>
<td>103</td>
<td>.000</td>
<td>2.962</td>
<td>Lower: 2.76 Upper: 3.16</td>
</tr>
</tbody>
</table>

Source: Field Survey (2018)

Table 2 above revealed the t-value of 29.532 and p-value of .000 at two tail test, tested at 5% level of significance with the mean value of 2.962 at 103 degree of freedom. Since the p-value is less than the t-value, the null hypothesis which states that there is no significant benefit derived by SMEs from IFRS is hereby rejected. Therefore, Small and Medium Enterprises derived enormous benefits from IFRS. The findings agree with Nobes and Parker (2004); Ball (2006); and Barth (2008) whom empirically examined the feasibility of IFRS to include the potential advantages of producing more accurate, timely and complete financial information, eliminating international barriers syndromes in accounting standards and removing the obstructions to the global capital market. There are benefits SMEs derived from the IFRS.

The result of the hypothesis two revealed that the most possible benefits of using IFRS is that it has brought transparency and accountability to financial reporting system of SMEs. It is also discovered that SMEs prepare financial statement that is useful for investors and suppliers, these supported the argument of Cristian, Claudio, Monica, Theresa and Christine (2011) which say that the majority of SMEs owners such as sole proprietors are only the person who has a detailed knowledge of management; the financial statements adopted therefore offer an imperatives and fundamentals contribution to assessing their business economy and financial performance. The banks and other financial institutions are also important in financing the activities of SMEs and the financial statements are useful tools for their decision-making. Other users, such as the rating agencies, tax authorities, customers, suppliers, employees and competitors are also interested in financial statements of SMEs.

5. Conclusion and Recommendations

The study concludes that IFRS is pertinent to SMEs because it create awareness for SMEs business practitioners to adore the easy access to credit facilities from the apex bank in the country. The globally accepted accounting principles are significant to small business as they operate in a globalized world which reflected in the mean value of the respondents. The same trend was detected from the findings which unveiled that IFRS confers a countless benefits to Small and medium enterprises as it brought transparency and accountability to financial statement of an enterprise. It also concludes that IFRS stakeholders in alliance with government should continue to create more awareness and set an end-day to the compliance in other to enhance these international accounting standards on SMEs businesses in the country. Based on these findings, the study therefore recommended that National Accounting Standard Board (NASB) should continue to keep abreast of SMEs stakeholders’ in order to know more about the benefits of the Standards. It also recommends that government should mandate these standards to SMEs business owners to register with SMEDAN for onward transmission of financial statement.
References


Abstract
The study examines the effect of intrapreneurship on SMEs innovative performance in Lagos, Nigeria. Survey research design was employed through the administration of structured questionnaire on purposively selected employees of SMEs in Lagos. The findings revealed that intrapreneurship elements (innovation, risk taking and proactiveness) all have individual positive significant effect on the innovative performance of small and medium enterprises in Lagos, Nigeria, with coefficients and probability values of: Innovation ($\beta_1=0.718$, $p$-value < 0.05), Proactiveness ($\beta_2=0.531$, $p$-value < 0.05), Risk Taking ($\beta_3=0.290$, $p$-value < 0.05). While the $F$-Statistics = 39.014 ($P$-value<0.05) revealed that intrapreneurship elements have significant combined effect on SMEs innovative performance. The adjusted coefficient of determination (adj. $R^2$) of 0.478 suggests that intrapreneurship elements accounts for 47% variation in the SMEs innovative performance. It is concluded that the intrapreneurial activities of employees of SMEs determines their innovative performance. That is, intrapreneurship elements (innovation, risk taking and proactiveness) are significant determinants of SMEs innovative performance. It is therefore recommended that: SMEs should encourage intrapreneurial activities within their firms, employees should be encouraged to embrace innovativeness, and owners of SMEs should encourage their employees to take some level of risk as it tends to enhance the enterprise innovative performance.

Keyword: Intrapreneurship, Innovative Performance, SMEs

1. Introduction
The concept of intrapreneurship has engendered a lot of research interest and its roles within an organization cannot be overemphasised. Intrapreneurship, which depicts entrepreneurs within an organisation, is seen as a tool for achieving organizational goals. Gursoy (2016) posit that the growth of intrapreneurship in an organization aids the attainment of organization's goals. This is because; it is necessary for employees of firms to develop an innovative mindset. Bau and Wagner (2016) opine that the intrapreneurial behaviour of an organization is the process through which employees of a firm are empowered to promote, implement and ascertain novel business opportunities as well as creating and adding economic value within established organizations.

Innovativeness is required in the attainment of sustainable and competitive advantage for firms. The development of innovative disposition requires a firm to encourage intrapreneurship, this tends to enhance the innovative capacity of the employees. In the ever changing competitive business environment experienced in the world today, firms are expected to embrace innovativeness to be able to act and respond promptly, towards the attainment of their goals and to adapt faster to the business and economic environment than their competitors (Gursoy, 2016).

McGowan and Hu, (2014) opined that the adoption of intrapreneurial activities within a firm propels innovativeness, which is the foundation of firms’ competitiveness as well as economic growth of a nation. The development and utilization of new methods, risk taking ability and proactiveness towards the attainment of organizational goals are features of intrapreneurship.

SMEs contribute significantly to socio-economic growth of nations. In Nigeria, SMES account for millions of employment opportunities, reduces poverty as well as contributing to the gross domestic product (Eze, Oladimeji & Fayose, 2019). Small and medium enterprises development agency of Nigeria [SMEDAN] (2007) perceived Small enterprises as business entities that have between ten to forty nine employees with asset (excluding land and building) of between five million naira and less than fifty million naira, while medium enterprises are business entities that have between fifty and one hundred and ninety nine employees with asset (excluding land and building) of between fifty million and less than five hundred million naira.
In today's highly competitive business environment, the significance of innovation is widely acknowledged by various scholars. Innovativeness has been found as an important determinant of firms' performance regardless of industry (Deshpandé & Farley, 2004; Akintunde, 2013; Eze, 2018). In the same way, the importance of intrapreneurship is recognized, and it is seen as an instrument and as an essential element in the innovation process. Bhardwaj and Momaya (2011) opine that intrapreneurship serves as a mediator leading to innovation. The link between intrapreneurship and innovation represents an extensively examined research topic, although with varying research outcomes. The dynamics of the two concepts can be reciprocal, and thus the innovative performance of the organization may also affect its intrapreneurial activities. In other words, successful innovative performance of an organization may encourage the enhancement of intrapreneurial activities, whereas poor innovative performance may inhibit intrapreneurial activities. Apart from direct financial benefits, intrapreneurship can propel several adjoining desirable upshots, such as: novel ideas generation, employee job satisfaction and enhanced personnel performance (Auer-Antoncic & Antoncic, 2011; Holt, 2007). Tactically, intrapreneurship can be viewed as a fundamental component in the growth of a firm, because it enhances employee motivation and productivity as well as the cost effectiveness, and speed of operations. It equally promotes effective teamwork (Anu, 2007).

Kuz (2010) asserts that there is no unanimous, coherent understanding about the proper execution of intrapreneurship. However, most management and entrepreneurial literature tends to emphasize the significance of the processes and procedures for introducing intrapreneurship in a firm. He further posits that some factors determine the occurrence of intrapreneurship. These factors include: Corporate structure, human resource practices, organisation culture and strategy as well as management behavior.

Levels of Intrapreneurship

Scholars have approached the concept of intrapreneurship from different perspectives. Antoncic and Hisrich (2003) identified three main areas of focus within the intrapreneurship domain. The early literature focused on the idea of individual intrapreneur, with emphasis on individual characteristics. Later on, a second area emerged, concentrating on types of internal corporate ventures, their fit with the organization, and the organizational characteristics enabling them. The third area has been the intrapreneurship phenomenon on the organizational level (Antoncic & Hisrich, 2003). Overall, organizational level has attained a more widespread interest than individual level in academia (Hashimoto & Nassif, 2014). Furthermore, a separate research branch stresses the team viewpoint in the emergence of intrapreneurship (Burgess, 2013). Therefore, three main organizational levels of analysis can be recognized; individual, team and organizational level.

As this study is focused on organizational-wide intrapreneurship, with major emphasis on the individuals within the organization, and innovative performance as the primary objective, it is therefore essential to define the primary level of analysis. The research on intrapreneurship on the individual level is primarily focused on the traits of intrapreneurial individuals and the means of utilizing these individuals in the pursuit of corporate intrapreneurship. According to Dauber et al (2013), individual champions are mostly involved in corporate innovation. These individuals are personally committed organizational members leading the
innovation efforts. Opportunity recognition usually starts from individuals rather than organizational processes or practices.

Contrary to the individual approach, intrapreneurship has also been examined as a team level phenomenon. Teams represent a central unit for creating new ventures, as they bring together a pool of talent with versatile skills and knowledge, thus creating an interface for new initiatives to emerge. Teamwork is frequently utilized as a tool in improving organization-wide cooperation, facilitating idea sharing and thus creating a favourable environment for entrepreneurship to thrive (Eesley & Longenecker, 2006). Bhardwaj and Momaya (2011) argued that a successful team exceeds the sum of the know-how of its members. The strength of certain individuals within the team supports the weaknesses of others (Jaakkola, 2009). Eesley and Longenecker (2006) posit that cross-organizational teams can reduce the structural bureaucracy in firms, and increase innovative initiatives at all organizational levels. Intrapreneurship is more likely to be achieved through teams than through individuals in large firms and highly complex setting (Bechtold, 1997; Burgess, 2013).

A good number of contemporary literature on intrapreneurship stresses its role as an organization-wide phenomenon. Anu (2007) asserts that innovation rarely occurs as an individual flash of genius, but rather is a result of conscious and systematic search of opportunities. Intrapreneurship is presented as being deliberate, systematic organization level work rather than existing qualities, such as individual level of intelligence or skills. In the same way, the study of Holt (2007) downplays the significance of individual characteristics, and emphasizes process as the primary means of controlling intrapreneurship. However, this study employs individuals in the firms as the elements of observation. This is because, the organisation as a whole and the organisational teams are made up of individuals.

**Innovation Performance**

Kotler (2006) posits that innovation is any goods, service or idea that is perceived by someone as new. Furthermore, Heunk (2007) perceived innovation as the successful execution of a creation and that innovation tends to enhance business growth. Aliu (2010) opines that the highly competitive business environment is propelling many organizations to innovatively developing new ideas as well as modifies existing ones, towards bringing about new and improved offerings. Aliu (2010) identified some features of innovation, which include:

i. Relative advantage- which is the degree to which innovation appears superior to existing product.

ii. Compatibility- which is the degree to which the innovation can go with existing product of the organization.

iii. Complexity- which defines the degree to which the innovation is relatively difficult to understand.

iv. Divisibility- which defines the degree to which the innovation can be tried on a limited scale.

v. Communicability- which is the degree to which the beneficial results of usage are observable or describable to others.

Oladimeji, Abosed and Eze (2018) assert that innovation is the introduction of new or improved product to the market, improvement in the production process as well as the creation of new market for a product. Innovative performance can be viewed as a key driver of business performance. Hanifah, Halim, Ahmad and Vafaeei-Zadeh (2017) posit that innovative performance is the use of creativity to improve the product and processes that enhances the significance, usefulness and performance of the products and services. Iglaesias-Sanchez, Correia and Carmen (2019) views innovation performance as the achievements and results derived from innovation. From the foregoing it can be deduced that innovative performance refers to the ability to transform innovation inputs into outputs resulting in the success of the innovative outcome in the market. For this study, innovative performance is seen as the outcomes of innovativeness and the benefits derivable from innovative process.

**Theoretical Framework**

The theory underpinning this study is the organizational perspective theory, organizational orientation resonates with the non-rational, affective elements of individuals, and provides a sense of collective membership and belonging that is a general human characteristic (Antonicic, 2003). Organizational perspective theory is based on its three perspectives, which are the modern, symbolic-interpretive and the post-modern. The three perspectives each have diverse approaches towards the management of an organization. Modernists are objectivists who focus on reality of knowledge which is build based upon the conceptualization and the theorization.

A very good example would be that an organization generates more revenue based on the Chief Executive’s ability to make right marketing decisions. The results of the actions can be measured in profit and loss and
can be directly measured. The data which modernists recognize are from the five senses, through what they see, hear, touch, smell and tasted. Modern Perspective builds a set of rules that can be used in organization so that all employees will be able to follow, perform and function, ensuring the entire process in the organization runs smoothly. Modernists do not take into account the symbolic perspective of looking outside of the five senses and looking at emotion and intuition (Hatch & Cunliffe, 2006).

The theory connects the organization to the individual worker in the organization. The theory postulates that the success of the organization is based on the role the individual worker plays. The modernists recognize that the five senses, through which the individual worker sees, hear, touch, smell and taste are pivotal to the way he reasons and act and all actions of the organization channeled towards these senses makes the individual worker to work beyond the organizations expectations and otherwise. Modern Perspective builds a set of rules that can be used in organization so that all employees will be able to follow, perform and function, ensuring the entire process in the organization runs smoothly.

**Theoretical Framework**

![Diagram showing the relationship between Innovativeness Propensity, Risk Taking Propensity, Proactiveness Propensity, Intrapreneurship, and Innovative Performance]

**Source:** Authors (2019)

3. **Methodology**

The methodology employed to ascertain the effect of intrapreneurship on innovative performance of service firms was the survey research design; this is because data on intrapreneurial activities of employees of firms as well as innovative performance are rarely publicly available. The survey was conducted through the administration of structured questionnaire on some purposively selected employees of small and medium enterprises in Lagos, Nigeria. According to National Bureau of statistics [NBS] (2016), there are 11,663 SMEs in Lagos. The study employed Taro Yamane sample size estimation technique at 95% confidence level and 5% margin of error in arriving at a sample size of 372. A non-response rate of 20% was assumed, which further increased the sample size to 446. Well-structured questionnaire on a Nine points Likert scale ranging from 1 (minimum) to 9 (Maximum) was distributed among employees of 31 SMEs in Lagos. The questionnaire was grouped into Section "A" (innovative, risk taking and proactiveness disposition), "B" (Innovative performance). The research instrument (questionnaire) was validated using content validity index (CVI). The research instrument was evaluated by three academic staff in Mountain Top University. It was evaluated on two scales (Relevant and irrelevant), after which the CVI Formula was employed: 

\[ CVI = \frac{n}{N} \]

Where;

- CVI represents content validity index
- n represents the number of items rated as relevant
- N represents the total number of the questionnaire items

A CVI value of 0.7752 was obtained, which indicated that the research instrument is valid. The test-retest method was employed to ascertain the reliability of the research instrument. Pilot study was conducted by administering the research instrument on 20 employees of 2 SMEs in Lagos. The instrument was administered twice within an interval of two weeks, and the outcome of the first pilot study was correlated with that of the second, which gave a value of 0.7099, 0.7971, 0.7230 and 0.8858 for innovation, risk taking, proactiveness and innovative performance respectively. A value above 0.7 is usually seen as been reliable; therefore the research instruments for all the variables are reliable.
4. Results and Discussions
A total of 446 copies of questionnaire were administered. However, only 394 copies were returned and found useable, which is above the estimated sample size.

Table 4.1: Summary of result (Dependent Variable – Innovative Performance)

<table>
<thead>
<tr>
<th>Variable(s)</th>
<th>Coefficient</th>
<th>T-statistics</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.804</td>
<td>9.902</td>
<td>0.000</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.718</td>
<td>8.011</td>
<td>0.000</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.531</td>
<td>7.231</td>
<td>0.000</td>
</tr>
<tr>
<td>Risk Taking</td>
<td>0.290</td>
<td>4.913</td>
<td>0.000</td>
</tr>
</tbody>
</table>

F-Statistics = 39.014 (0.0000)  
Adj. R-Square =0.478

The result above revealed that intrapreneurship elements (innovation, risk taking and proactiveness) all have individual positive significant effect on the innovative performance of small and medium enterprises in Lagos, Nigeria, with coefficients and probability values of: Innovation ($\beta_1=0.718$, p-value < 0.05), Proactiveness ($\beta_2=0.531$, p-value < 0.05), Risk Taking ($\beta_3=0.290$, p-value < 0.05). The F-Statistics = 39.014 (P-value<0.05) revealed that intrapreneurship elements have significant combined effect on SMEs innovative performance. The adjusted coefficient of determination (adj. $R^2$) of 0.478 suggests that intrapreneurship elements accounts for 47% variation in the SMEs innovative performance.

5. Conclusion and Recommendations
The study examines the effect of intrapreneurship on SMEs innovative performance in Lagos, Nigeria. Survey research design was employed through the administration of structured questionnaire on purposively selected employees of SMEs in Lagos. The findings revealed that intrapreneurship elements (innovation, risk taking and proactiveness) all have individual positive significant effect on the innovative performance of small and medium enterprises in Lagos, Nigeria. While the F-Statistics = 39.014 (P-value<0.05) revealed that intrapreneurship elements have significant combined effect on SMEs innovative performance. The adjusted coefficient of determination (adj. $R^2$) of 0.478 suggests that intrapreneurship elements accounts for 47% variation in the SMEs innovative performance.

It is concluded that the intrapreneurial activities of employees of SMEs determines their innovative performance. That is, intrapreneurship elements (innovation, risk taking and proactiveness) are significant determinants of SMEs innovative performance.

The following are therefore recommended:

i. SMEs should encourage intrapreneurial activities within their firms
ii. Employees should be encouraged to embrace innovativeness
iii. Owners of SMEs should encourage their employees to take some level of risk as it tends to enhance the enterprise innovative performance.

Limitations and Recommendation for Further Study
In the light of taking into consideration the findings and the recommendations of this study one must not forget to also consider the limitations accordingly. The data was collected from only some selected SMEs in Lagos State, Nigeria. Therefore, generalizing it to other SMEs must be done with care. Another drawback of the study is that, it focused on only SMEs and generalizing it to other sectors must be carefully thought through. There is the need to also focus on other sectors such as Micro Enterprises and large enterprises as well as other states to get more insight into the concepts. A purposive sampling method adopted for the selection of the SMEs and sample for the study is another limitation to the study. Though it was helpful it was not based on probability method and can compromise the generalization power of the research results. Therefore, further studies can be conducted incorporating micro and large enterprises. Other states in Nigeria as well as other nations (particularly, developing and emerging nations) can be considered. Also, probability sampling methods such as simple random or systematic sampling method can be adopted to increase the generalization power of the research results. Key participants interview can equally be conducted, as it tends to yield more outcomes.
References


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Abstract

The paper determined the relationship between working capital management and performance of Small Scale Enterprises in Osun State of Nigeria. The Study made use of primary data collected through the use of a structured questionnaire. Multistage sampling method was adopted in the study. Clustered Random sampling was used in selecting the Local Government Area of the study on the Senatorial districts basis while purposively random sampling was employed in selecting respondents or Small Scale Enterprises in the selected Local Government Areas. Data collected were analyzed using regression analysis. The result shows that there were significant and positive relationship between Firm’s performance (FP) and Efficiency in Cash Management (ECM) (r=0.272; p- value<0.01), Firm Performance and Efficiency in Receivable Management (ERM) (r=0.330; p- value<0.01) and between Efficiency in Inventory Management (EIM) and Firm Performance (r=0.436; p- value<0.01). The Study concluded that efficient working capital management practices would have positive significant influence in the financial performance of Small Scale Enterprises in Nigeria.

Key Words: Working Capital Management, Cash Management, Receivable Management and inventory Management.

Word Count: 156

1.1 INTRODUCTION

The management of the working capital is important as the management of long-term financial investment. Every business needs working capital. Even a business, which is fully equipped with all types of fixed assets required, is bound to collapse without adequate supply of raw materials for processing, cash to pay for wages, power, and other costs, creating a stock of finished goods to feed the market demand regularly, and the ability to grant credit to its customers. All these require working capital. Working capital is thus like the lifeblood of a business. The business will not be able to carry on day-to-day activities without the availability of adequate working capital.

The management of working capital is important to the financial health of businesses from all industries. To reduce accounts receivables, a firm may have strict collections policies and limited sales credits to its customers, this would increase cash inflow. However, the strict collection policies and lesser sales credit would lead to lost sales, thus reducing the profit. Maximising account payables by having longer credit from the suppliers also has the chance of getting poor quality materials from suppliers that would ultimately affect the profitability. Minimising inventory may lead to lost sales by stock-outs. The working capital management should aim at having balanced; optimal proportions of the working capital management components to achieve maximum profit and cash flow.

A firm may adopt an aggressive working capital management policy with a low level of current assets as percentage of total assets or it may also be used for the financing decisions of the firm in the form of high level of current liabilities as percentage of total liabilities. Excessive levels of current assets may have a negative effect on the firm’s profitability whereas a low level of current assets may lead to lower level of liquidity and stock outs resulting in difficulties in maintaining smooth operations (Van Home and Wachowicz 2004).

The Small Scale Enterprises (SSE) businesses remain the most dynamic force and agent of economic growth and development of a nation. Small and medium scale enterprises have long believed to be catalysts for economic growth and national development both in developed and developing countries. The small scale enterprises generates at least 60% of the USA GDP (Ovia, 2001) In Nigeria, the SSEs are all around us, the
fact that only few amount is required to start an SSE make it the most popular term of business. The SSE constitutes the major breakthrough in several emerging sectors. SSE propelled most breakthroughs in Information Technology (IT) in the U.S.A. Microsoft Disk Operating System (MS Dos) that enabled about 80% of the world PCs to operate was developed in 1980 by Bill Gates and Paul Allen when their company was a small-scale enterprise. In India, IT industry exported about 6 billion softwares and related services in year 2000. This amount is just a little less than Nigeria’s oil revenue of $9 billion for the same period (Ovia, 2001).

It is generally believed that SSE promotes poverty eradication, job creation, rural development and sustainable livelihood for the populace which was shown in the work of Iwere (2013). However, entrepreneurs in this sector still face many challenges that limit their long term survival and development despite the contributions of small scale businesses to economic growth and sustainable development in Nigeria. Empirical evidence shows that three out of five businesses fail within the first few months of operation due to the little concerns for their working capital position with no policy for the management of the same as well as credit issues. The combination of debtors’ management strategy, cash management, account payable, (or creditors) and most importantly stock management strategy left much to be desired by SE.

Working capital management is of paramount importance to the profitability of Small Scale Enterprises (SSEs) of any economy. Limited access to long-term capital has been the bane of SSEs, hence, they tend to rely more on owner’s self-sourced financing and working capital components such as trade credit and short – term bank loans. Adequate management of working capital therefore has been of utmost importance to these firms. It has been observed that not many SSEs in Osun State practice Working Capital Management. There is therefore the need to investigate the relationship between working capital management and performance of the small scale enterprises in Osun state, hence inform this study.

2.0 LITERATURE REVIEW

2.1 Conceptual Review

Working Capital Management and Small Scale Enterprises Performance

While the performance levels of small businesses have traditionally been attributed to general managerial factors such as manufacturing, marketing, and operations, working capital management may have a consequent impact on small business survival and growth (Kargar and Blumenthal, 1994). The management of working capital is important to the financial health of business of all sizes. The amounts invested in working capital are often high in proportion to the total assets employed and so it is vital that these amounts are used in an efficient and effective way. However, there is evidence that small businesses are not very good at managing their working capital. Given that many small businesses suffer from undercapitalization, the importance of exerting tight control over working capital investment is difficult to overstate.

A firm can be very profitable, but if this is not translated into cash from operations within the same operating cycle, the firm would need to borrow to support its continued working capital needs. Thus, the twin objectives of profitability and liquidity must be synchronized and one should not impinge on the other for long. Investments in current assets are inevitable to ensure delivery of goods or services to the ultimate customers and a proper management of same should give the desired impact on either profitability or liquidity. If resources are blocked at the different stage of the supply chain, this will prolong the cash operating cycle. Although this might increase profitability (due to increase sales), it may also adversely affect the profitability if the costs tied up in working capital exceed the benefits of holding more inventory and/or granting more trade credit to customers.

Another component of working capital is accounts payable, but it is different in the sense that it does not consume resources; instead it is often used as a short term source of finance. Thus it helps firms to reduce its cash operating cycle, but it has an implicit cost where discount is offered for early settlement of invoices.

2.2 Empirical Review

Empirical evidence shows that Working Capital Management in Kenya (Kosgey & Njiru, 2016) has significant effects on SMEs significance performance. On the other hand, there can be negative effect on the accumulation of working capital, because over investment could destroy the value of companies. An example from Napompech (2012) in Thailand reveals a negative relationship between cash conversion cycle, receivables collection period, inventory conversion period and average payment period. Over the recent past decades was negative precisely due to this overinvestment.
In Nigeria, study conducted by Sadiq (2017) shows that account payables period, and cash conversion cycle have positive effect on performance, while account receivables period and inventories turnover in days has negative relationship with performance. Based on the results analysis of annual data by using correlation and regression tests, they suggested that managers can create profits for their companies by correctly handling the cash conversion cycle and by keeping each component of the conversion cycle (accounts receivables, accounts payables, and inventory) at an optimal level.

In an effort to determine the working capital practices of corporate bodies in Nigeria, Salawu (2007) investigated fifteen diverse industrial groups over an extended period to establish the practices between aggressive and conservative working capital practice approaches. Results strongly show that firms in differing industries have significantly different current asset management policies. It is evident from the study that there is a significant negative correlation between industry asset and liability policies. Relatively aggressive working capital asset management seems balanced by relatively conservative working capital financial management. Small Scale Enterprises were excluded from the study.

Likewise, Falope and Ajilore (2009) looking at the relationship between working capital management and profitability, make use of Quoted companies rather than SSEs. They used a sample of 50 Nigerian quoted non-financial firms for the period 1996 -2005. Their study utilized panel data econometrics in a pooled regression, where time-series and cross-sectional observations were combined and estimated. They found a significant negative relationship between net operating profitability and the average collection period, Inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. Furthermore, they found no significant variations in the effects of working capital management between large and small firms. Although, the work centered on corporate firms the relevancy of the finding in SME need empirical investigation.

3.1 Methodology

There are 3380 Small Scale Enterprises (SSEs) in Osun State out of with three hundred and sixty were selected. SSEs engaging between 11-35 employees or with capital investment from one million to forty million naira were selected based on National Council of Industry 1999 Classification.

Multistage sampling method was adopted in the study. Clustered Random sampling was used in selecting the Local Government Area of the study on the Senatorial Districts basis while purposively random sampling was employed in selecting respondents or Small Scales Enterprises in the selected Local Government Area

The three Senatorial districts (Osun West, Osun East and Osun Central) of Osun State of Nigeria were adequately represented, which covered Nine out of thirty local Government Areas of Osun State that covers 360 Enterprises randomly selected from the total population of 3380 respondents, which were initially identified through preliminary survey of Small Scale Enterprises in Osun State. The enterprises were purposively selected from different industries within each selected Local Government Area based on their readiness to provide the required information, thus; Osun East Senatorial District(Ife Central Local Government LG - 48 , Ife East LG - 27, and Ilesa West LG - 45), Osun West Senatorial District(Ede North LG - 43, Ede south LG - 46,and Ayedaade LG - 31), Osun Central Senatorial District (Osogbo LG - 51, Olorunda LG - 43,and Ifelodun LG - 26.).

However, only 324 copies of the returned questionnaires were found useful. Primary data were collected using structured questionnaire which was administered with the help of well-trained enumerators. Questionnaires were used to obtain data from the sample selected.

Regression Model Specification

Primary data on variable such as cash management, inventory management and receivables management as proxy for working capital management and return on assets as proxy for financial performance was sourced.

The firms’ performance is expected to be influenced by Efficiency in Cash Management, Inventory Management and Receivables Management. These factors are identified on the basis of similar studies done by Nyamao et al (2012) based on Ledgerwood (1999) work.

The Regression model adopted for this study was as summarized below:

\[
FP = \beta_0 + \beta_1 ECM + \beta_2 ERM + \beta_3 EIM + e \quad \text{..................................................(1)}
\]

Where:

\(\beta_0, \beta_1, \beta_2\) and \(\beta_3\) are coefficients;
ECM - Efficiency in Cash Management;
EIM - Efficiency in Inventory Management;
ERM - Efficiency in Receivables Management;
FP - Financial Performance indicator and
Since the study is qualitative in nature, firm performance being the dependent variable used in this study was measured on the works of Ledgerwood (1999) as used by Tumwine (2010). A likert scale running from 1-5 (Strongly agree to strongly disagree) was used to establish the perceived firm performance in relation to profitability, businesses’ sales, market share, profits and total assets.

Efficiency in working capital management practices is the independent variables in this study. The model used three explanatory factors of efficient Working Capital Management similar to the ones used by Nyamao et al, (2012) namely: Efficiency in Cash Management (ECM), Efficiency in Receivables Management (ERM) and Efficiency in Inventory Management (EIM).

Efficiency in Cash Management (ECM): This variable focused on the frequency of cash budgeting and target cash balance determination, occurrence of cash surplus or shortage and investment of cash surpluses. The construct was on the 5 points Likert scale ranging from Not at all to very large extent.

Efficiency in Receivables Management (ERM): On this variable, construct of working capital management was defined to constitute questions as to what extent has a sound credit policy is often reviewed and improved on in order for the businesses’ ability to attract new customers. Similarly, a likert scale running from 1-5 (Not at all to very large extent) was adopted.

Efficiency in Inventory Management (EIM): A likert scale running from 1-5 (Not at all to very large extent) was used to measure efficient inventory management practices that answer the questions: how often is inventory budget is prepared and reviewed? These questions relate to the problem of determining the economic order quantity and its associated cost implication.

A multiple regression technique was used to examine the nature of the relationship between the endogenous variable (firm performance) and exogenous variables (Working Capital management practice). The ordinary least square technique was used to estimate the parameters of the model.

Findings
The objective of the study was to establish the relationship between Working Capital Management and firms Profitability of the Small Scale Enterprises. To achieve this, a Pearson correlation matrix was used to test the relationship that exists between the independent variables against the dependent variable (Working Capital Management). The results of the analysis are shown in the table 18 below.

<table>
<thead>
<tr>
<th></th>
<th>FP</th>
<th>ECM</th>
<th>ERM</th>
<th>EIM</th>
</tr>
</thead>
<tbody>
<tr>
<td>FP</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECM</td>
<td></td>
<td>.272*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERM</td>
<td></td>
<td></td>
<td>.502*</td>
<td></td>
</tr>
<tr>
<td>EIM</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

**Correlation is significant at the 0.01 level (2-tailed).**

Source: Authors’ Computation 2018

Table 1 above revealed that there was a significant and positive relationship between Firm Performance (FP) and Efficiency Cash Management (ECM) (t=0.272**; p-value<0.01). The result implies that the greater the level of Efficiency Cash Management (ECM), the greater the level of firm performance is likely to be realized. Furthermore, the results revealed that there was a significant and positive relationship between firm performance and Efficiency Receivable Management (ERM) (t=0.330** p-value<0.01). This result connotes that with increase in Efficiency Receivable Management (ERM), firm performance is likely to increase.

Still from the correlation matrix above, the results further revealed that there was a significant and positive relationship between Efficiency Inventory Management (EIM) and firm performance (t=0.436**; p-value<0.01). This result implies that paying attention to Efficiency Inventory Management (EIM), the more likely will be performance of the firm.

These findings are in line with previous findings of the earlier researches on working capital management and businesses’ performance. The study of many of the researchers have showed that businesses’ performance is correlated positively to the Working Capital Management practices (Padachi, 2006; Benjamin and Kamalavali, 2006; Kotut, 2003; Sushma and Bhupesh, 2007) and are therefore supported by this research finding.
4 Regression Result of the Determination of the Working Capital Management

A multiple regression analysis was used to analyze the third objective, the statistical relationship to which the predictors which are; Efficiency Cash Management (ECM), Efficiency Receivables Management (ERM) and Efficiency Inventories Management (EIM) explain Firm Performance.

For the multiple regressions to be reliable, some diagnostic tests were carried out on the data to be used. Foremost, collinearity statistics was computed to ensure that there was no violation of the assumption underlying the use of regression analysis as regards the existence of multicollinearity among the independent variables, before conducting the regression analysis. As shown on Table 2 below, the Tolerance value was high ranging from .700 to .803 as the figures are far above 0.1 the minimum and generally acceptable level and the Variance Inflation Factor (VIF) ranged between 1.246 to 1.429 respectively. As these values are very low, it indicates that those figures are at acceptable level as value above 10 indicates problem of multicollinearity. The results show that there is no problem of multicollinearity among the variables.

Table 2 showing the result of Collinearity Statistics

<table>
<thead>
<tr>
<th>Model</th>
<th>Collinearity Statistics</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECM</td>
<td>.710</td>
<td>.700</td>
<td>1.408</td>
</tr>
<tr>
<td>ERM</td>
<td>.700</td>
<td>1.429</td>
<td></td>
</tr>
<tr>
<td>EIM</td>
<td>.803</td>
<td>1.246</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: FP

Source: Authors' Computation 2018

Autocorrelation was also verified using Durbin-Watson statistics, which shows a figure of 1.842, which is close to acceptable standard of 2.0. This shows that there is no autocorrelation problem in the model.

Table 3 showing the Result of Regression Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.471*</td>
<td>.222</td>
<td>.215</td>
<td>9.51535</td>
<td>.222</td>
<td>30.451</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), EIM, ECM, ERM
b. Dependent Variable: FP

Source: Authors’ Computation 2018

Table 4 showing ANOVA Result

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression</td>
<td>8271.156</td>
<td>3</td>
<td>2757.052</td>
<td>30.451</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>28973.400</td>
<td>320</td>
<td>90.542</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>37244.556</td>
<td>323</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: FP
b. Predictors: (Constant), EIM, ECM, ERM

Therefore, from Table 3, the adjusted R square value indicated that 21.5% of the variance in EI was explained by the contributions of Efficiency in Cash Management; Inventory Management and Receivables Management. As regards the contribution of the each independent variables to the variation explained in the regression result above, the model specified above was further analysed to determine the contribution of the independent variables that is by Efficiency in Cash Management; Inventory Management and Receivables Management to the variance of dependent variable (Firm Performance) using Statistical Package for Social Scientists (SPSS) version 17.0. Multiple regression analysis helps us to understand how much of the variance in the dependent variable is explained by a set of predictors. This is the statistical relationship that explained the extent to which the predictors; by Efficiency in Cash Management; Inventory Management and Receivables Management all together, explain Working Capital Management. The Coefficient summary of the regression as indicated in Table 22 below:

Table 5: showing the Coefficients Results

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>33.080</td>
<td>2.083</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ECM</td>
<td>.181</td>
<td>.181</td>
<td>.059</td>
<td>1.004</td>
<td>.316</td>
</tr>
<tr>
<td>ERM</td>
<td>.516</td>
<td>.187</td>
<td>.163</td>
<td>2.763</td>
<td>.006</td>
</tr>
<tr>
<td>EIM</td>
<td>1.561</td>
<td>.246</td>
<td>.350</td>
<td>6.353</td>
<td>.000</td>
</tr>
</tbody>
</table>
The result in Table 5 above shows the contribution of each variable in explaining the financial performance as shown by standardized beta values which assess the contribution of each variable towards the prediction of the dependent variable. Efficiency in a linear relationship between profitability and explanatory variables (F=30.451; P-value<0.000). In Table 5, the result shows that inventory management had the greatest effect on financial performance with a unit change in EIM, holding ECM and ERM constant, resulting to a 35% increase in financial performance, whereas efficiency in receivables management had the least effect with a unit of change in ERM holding ECM and EIM constant, resulting to a 16.3% increase in financial performance. Efficiency in cash management is not significant in this study as t-value equal to 1.004.

The overall equation as suggested in the conceptual framework can be represented by the use of standardised coefficients as follows:

\[ \text{FP} = 33.080 + 0.181 \text{CM} + 0.187 \text{ERM} + 0.246 \text{EIM}. \]

In conclusion, the regression model adjusted \( R^2 = 0.215 \) shows that 21.5% of the variability of financial performance could be attributed to changes in efficiency of cash management and efficiency of inventory management practices. Comparing the value of \( R^2 \) and adjusted \( R^2 \) gives a difference of 0.01 which is too small. This shows that the F-statistic which indicate that the set of independent variables were as a whole contributing to the variance in the dependent variable and that there was a statistically significant relationship between financial performance and the set of predictor variables (ECM, ERM, EIM) as shown by its F-statistic \( (F(3,320)) = 30.451 < 0.246 \).

**Conclusion**

This study shows that there is a relatively high support for the existence of a positive significant relationship between financial performance and working capital management practices. Generally, most researcher have established a positive relationship between efficiency in working capital management practices and business performance (Kotut, 2003; Padachi, 2006; Lazaridis and Dimitrios, 2005; Kwame, 2007). Moreover, based on the findings of this study, the central role of working capital management to the success of SSEs has been demonstrated by the empirical data from SSEs in Osun State.

The data analysis indicated that, those businesses whose managers were efficient in managing the working capital elements had higher financial performance; hence, emphasizing the pronouncement that efficient working capital management is an indispensable component for the success of SSEs. The finding by Falope and Ajilore (2009) which shows that there is a significant negative relationship between net operating profitability and the average collection period, Inventory turnover in days, average payment period and cash conversion cycle for a sample of fifty Nigerian firms listed on the Nigerian Stock Exchange. The findings also reinforce the establishment by Deloof (2003) which showed that, the way working capital is managed has a significant effect on the overall performance of businesses. The Study concluded that efficient working capital management practices would have positive significant influence in the financial performance of Small Scale Enterprises in Nigeria.
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ABSTRACT
There has been ongoing debate on the role of CSR in organizational activities. However, there is lack of consensus on the usefulness of CSR among privately-owned establishments. This study examines the impact of corporate social responsibility (CSR) on accounting conservatism in the Nigerian banking sector. The study employed the quantitative research design, precisely the experimental research design. The major findings of the study revealed that CSR captured as societal expenditure, employee relations expenditure and environmental management expenditure had positive but negligible impact on accounting conservatism in selected deposit money banks in Nigeria. A million naira increase in societal expenditure, employees relation and environmental management expenditure would increase conservatism approximately by 0.01%, 1.1% and 0.04% respectively. To this end, the study concludes that although corporate social responsibility promotes conservatism in the Nigerian banking sector, its impact is not robust.

Keywords: Accounting Conservatism, Corporate Social Responsibility, Societal Expenditure, Environmental Management Expenditure, Employee Relations Expenditure.

1. INTRODUCTION
Accounting is the process of identifying, recording, analyzing and communicating financial information to enable the users of this information to make decisions (Saad & Hanan, 2015). The accounting information is subject to a large number of standards, policies and accounting principles which governs the measurement process and accounting recognition to such process. The principle of caution (Accounting conservatism) is one of the important restrictions on accounting information because it takes cognisance to the lowest level of valuable things and income as well as higher values for expenses and losses (Basu, 2004; Saad & Hanan, 2015). The existence of criticisms against accounting conservatism as implies negativity that relates to the distortion of accounting information and makes it un-explainable therefore influences its suitability, reliability and comparability.

Amongst the external factors that affects conservatism practices are the operational interruption caused by hosting communities of organizations. The effect ranges from environmental degradation to societal conflicts as a result of the activities of these organizations. The idea of corporate social responsibility is advocated to bridge the existing conflicts between organizations and their hosting environments, thereby creating concern over the implementation and the quantification of the benefits to both the community and the organizations.

Although, series of arguments based on researches are found in literature as to the relevancy or irrelevancy of corporate social responsibility to the host community, there is no unanimous agreement on the subject matter due to the peculiarities of settings and the variations of methodology adopted by past studies (Aras, Aytbals & Kutlu, 2010; Cheng & Kang, 2016; Cooper & Wagman, 2009; Kim, Hatfield & Carlos, 2012; Karsalar, Agaee & Ghasemi, 2017). The adoption of corporate social responsibility practices by an organization is inconclusive in literature. Proponents maintain that CSR promotes the organizational performance while critics allude that CSR is injurious to an organization because it diverts the attention of an organization from the primary motives such an organization is established to less important issues.
To this end, the study evaluates the effect of corporate social responsibility on accounting conservatism in Nigeria with reference to the banking industry over a six-year period ranging between 2011 and 2016. Specific objectives of the study are to:

i. Assess the effect of societal expenditure on accounting conservatism in Nigerian banking industry.

ii. Investigate the effect of employee relations expenditure on accounting conservatism in Nigerian banking industry.

iii. Explore the effect of environmental management expenditure on accounting conservatism in the Nigerian banking industry.

The following hypotheses of the study are stated in their null:

i. Societal expenditure does not have significant effect on accounting conservatism in Nigerian banking industry.

ii. Employee relations expenditure does not significantly affect accounting conservatism in Nigerian banking industry.

iii. Environmental management expenditure has no significant effect on accounting conservatism in the Nigerian banking industry.

2. LITERATURE REVIEW

Bowen (1953) was the first person to recognize the concept of corporate social responsibility in his article titled "Social Responsibilities Businessman". Since then, corporate social responsibility is acknowledged to address the changes in business requirements and diverse social responsibilities (Omodero & Ogbonnaya, 2017).

There are some indices that are used for measuring corporate social responsibility in relation to performance (Guru, 2008). Corporate Social Performance Disclosure which makes use of content analysis of annual accounts and reports. This indicator provides an internal ratio or ordinal measurement of corporate social responsibility. Content analysis is the approach of measuring corporate social performance, which entails the textual evaluation of an organization's social and environmental disclosure in the annual accounts to deduce the social performance of the organization.

Kinder, Lydenberg & Domini (KLD) Index which was created by Kinder, Lydenberg and Domini (KLD) & Co in 1989. This index contains rating on a wide range of corporate social responsibility related items collated from various sources such as government agencies, NGOs, media, regulatory agencies and company disclosures (Guru, 2008). The KLD index arranges various CSR-related items such as qualitative issue areas which include the community, corporate governance, diversity, employee relations, the environment, human rights and product and service characteristics. For each qualitative area, KLD assigns a binary (1, 0) rating to a set of concerns and strengths. KLD index is regarded as the most widely used measurement of corporate social performance (Martial, 2010).

Corporate Responsibility Index which allows organizations to be assessed against a corporate responsibility framework, including an examination of how corporate responsibility is translated from strategy into mainstream management practice, and how material risks are monitored and managed. The response of an organization is then externally audited, and results are published.

2.1.3 Concept of Accounting Conservatism

Accounting conservatism according to Basu (2004) refers to the pursuit to acquire a higher level of certainty for the recognition of good news such as profits, and to have a lower level of certainty for the recognition of bad news such as losses and casualties. Wasaki, Otomasa, Shiiba and Shuto, (2018) defines accounting conservatism as the asymmetry between verification requirements of profits and losses, so that increased difference between the degree of verification required for profits and degree of verification required for losses mean greater conservatism. Hamdan (2012) views accounting conservatism as the disclosure of the minimum values of assets, revenues and higher values of obligations and expenses.

The amount of conservatism in the preparation of financial statements or the quality of accruals items presented in financial reports is the criteria by which the quality of financial reporting can be measured (Wang, Ziljil & Hogartaigh, 2009). The principle of conservatism is one of the first and most important ways of dealing with the ambiguity of transactions and events of the economic unit. The essence of accounting conservatism is to provide accurate information for the correct financial decision-making of an organization. Hsieh & Novoselov, (2018) consider accounting conservatism as selection of method and estimation from accounting which evidently shows asset book value lower than usual. Thus during inflation conditions choosing of Last-in-First Out (LIFO) technique instead of First-In-First-Out (FIFO) is a conservative method to identify inventory. Similarly, the application of least cost in market for allocating the cost of research and development expenditures, selection of depletion fast techniques and policies that lead to consider higher
Wang, Ziljil and Hogartaigh (2009) maintain that several measures have been put forward in literature to measure accounting conservatism. The common measures are asymmetric timeline of profits, asymmetric receivables to cash flows, measure of book value to market value, net asset measures, valuation model measures, accrual measures, earning measures and earning stock relation measures.

Asymmetric Timeline of Profits (Basu 2004) indicates that under accounting conservatism, the bad news will be reflected on profits faster than good news, so that negative revenues will fully reflect the entire profit of the period they occurred. The positive earnings dividends will reflect the profits of the period partially, thus the profit will be more closely associated with the movement of the share price in periods described with bad news compared to the period of good news. Basu (2004) adopts the equation below to capture conservatism:

\[
\frac{\text{EPS}_t}{\text{P}_t} = a_0 + a_1 \text{R}_t + a_2 \text{D}_t + a_3 (\text{DFO}_t \cdot \text{R}_t) + u_t
\]

Where: \(\text{EPS}_t\) = earnings price share; \(\text{P}_t\) = share price at the beginning of the year; \(\text{R}_t\) = rate of compound earning share; \(\text{D}_t\) = a dummy variable that takes the value of (1) if the earnings of a share is less than zero (0) which is bad news and (0) values if the earnings of a share is more than zero (0) which is good news. Asymmetric Receivables to Cash Flows (Ball 2006) modified the measure of asymmetric receivables to cash flow, which can be expressed as:

\[
\text{ACC}_t = a_0 + a_1 \text{DFO}_t + a_2 \text{CFO}_t + a_3 (\text{DFO}_t \cdot \text{CFO}_t) + u_t
\]

Where ACC is the total receivables; CFO is the cash flows and DFO is a dummy variable valued zero (0) if the cash flow is greater than or equal to zero (0); the value of (1) if the cash flow is less than zero (0).

Measure of Book Value to the Market Value explains that as the accounting conservatism system tends to reduce the net book value of the company to the actual economic value; if the ratio of book value is reduced to the ratio of market value, signifying a high degree of accounting conservatism (Wang, Ziljil&Hogartaigh, 2009). Whenever the ratio of the book value to the market value ratio is less than one, it indicates the existence of conservatism.

Net Asset Measure is the market value of the assets and liabilities which consist of net assets change every period but all these changes are not recorded in the account and financial reports. In conservatism, increases in assets (gains) that are not verifiable are not recorded while decreases of similar verifiability are recorded. The result is that net assets are understated below market value. Researchers such as Wasaki et.al, (2018) obtained estimates of this understatement using models of valuation of the firm's shares and/or the ratio of the firm's book value of net assets to its equity value.

Valuation Model Measure, (Feltham & Ohlson valuation model 1995) are usually employed to estimate the extent of undervaluation of net assets. This model includes parameters that reflect the degree of understatement of operating assets. The model induces the understatement by assuming accounting depreciation exceeds economic depreciation. Conservatism parameter estimates are obtained from estimation of valuation model and from time series estimation of the relation between accounting variables that are inputs to the valuation model. The valuation model estimate comes from cross-sectional regression of firm market value on abnormal earnings, assets and investment (Beaver, 2002). Ahmed and Schafer (2004) regressed firms’ goodwill on abnormal earnings, lagged operating assets and contemporaneous investment in operating asset. To the extent the book value of net assets is underestimated, goodwill is overstated. The coefficient of lagged operating assets should be positive if conservatism has understated the lagged assets.

Earnings Measures explained that under literature, negative earnings changes are more likely to reverse in the next period than positive earnings changes. In confirming this assertion, Basu (2004) regressed earnings changes, deflated by beginning-of-period price, on lagged deflated earnings changes for samples of positive and negative earnings changes.

Accrual Measure,(Hayn 2009) noted that conservatism reduces cumulative reported earnings overtime. He suggested the sign and magnitude of accumulated accruals overtime are measures of conservatism. In Earnings Stock Relation Measures, Stock market prices tend to show asset value changes at the time those changes occur whether those changes imply losses or gain in asset-value stock returns tend to be timely (Hayn, 2009). Since conservatism predicts that accounting losses are predicted to more contemporaneous

2.2 Theoretical Review
Several theories have been postulated in literature to explain corporate social responsibility. The relevant ones among them are agency theory, legitimacy theory, social benefit theory and stakeholder theory. The agency theory talks about an organization as a link between the agents and their principals because of the contractual relationship the agent (manager) is carrying out on behalf of the principals (shareholders). The theory is concerned with resolving conflicts that exists between the principal (shareholders) and agents (top officials in the organization).

Legitimacy theory was developed by Neuin 1998 and the theory posits that organizations must consider the rights of the community at large, not merely those of investors or shareholders. If the organization does not act within bounds of the behavior considered appropriate by the community, the community will act to remove the organization’s right to continue its operations. Shehu (2015) maintains that organizations are bound by social contract in which they agree to perform various socially desired actions in return for approval of its objectives and other rewards, and this can ultimately guarantee its continued existence.

Social benefit theory promotes firms contribution towards the wellbeing of the host communities. Businesses do not operate in a vacuum; somehow, the daily pollution as a negative externality affects the people in the environment. Watt (2007) alludes that social benefit theory makes organizations to consider the welfare of their host communities and to discharge their social responsibilities that will benefit all interest groups in the society.

The concept of stakeholder was first used in 1963 internal memorandum at the Stanford Research Institute. They define stakeholders as those groups without whose support, the organization would cease to exist. The theory was later modified and championed by Freeman in the 1990s. Since then, it has gained wide acceptance in business practice and in theories related to strategic management, corporate governance, business purpose and corporate social responsibility. Low(2015)notes that stakeholder theory is true if and only if stockholder theory is true and the only way that managers can maximally serve the interests of shareholders is by serving the interests of all stakeholders.

2.3 Empirical Review
Saad and Hanan (2015) assess the effect of accounting conservatism on the fair value of Jordanian industrial companies during the period 2006-2013. 30 industrial firms listed on Jordanian Stock Exchange were sampled. The dependent variable of the study is the fair value of the company proxied by market capitalization while the independent variable is accounting conservatism proxied by the ratio of book value to market value. Total assets, return on assets, debt to equity ratio, dividend payout ratio and fixed assets ratio to total assets are adopted as control variables. The results indicate that accounting conservatism positively and significantly affects the fair value of selected firms. Also, total assets and return on assets are positively and significantly affects fair value of selected firms while dividend payout ratio and fixed assets ratio have no significant impact on fair value of selected firms.

Omodero & Ogbonnaya (2017) examines corporate social responsibility and profitability of commercial banks in Nigeria between 2006 and 2015. A total number of ten banks out of twenty-one commercial banks in Nigeria were selected for the study. Profitability is measured by profit after tax, total revenue and net asset while corporate social responsibility is represented by natural logarithm of CSR expenditure. The results indicate zero impact of profit after tax and total revenue while the impact of net asset is negative. The probability values of the variables are not significant. The study maintains that expenditure on CSR is not significant enough and has not been positively affected by the financial performance of banks.

Jibrin, Dahiru and Mukhtar (2016) investigate the relationship between corporate social responsibility and financial performance of listed deposit money banks in Nigeria for a 6-year period ranging from 2008 to 2013. The data was obtained from the annual reports of twelve banks selected for the study. Corporate social responsibility as the independent variable was proxy by natural logarithm of the total amount spent on corporate societal activities while return on assets and return on equity are used to capture financial performance. The results indicate that corporate social responsibility has positive and significant effect on return on asset and return on equity of listed deposit money banks in Nigeria.

Karsalari, Aghaee and Ghasemi (2017) assess the effect of mandatory corporate social responsibility components on accounting conservatism in Tehran Stock Exchange for the period between 2011 and 2016. The study samples 100 listed firms in Iran. Net income is used to measure accounting conservatism while
corporate social responsibility expenditure, cash flow, depreciation cost ratio, age of firm and return on assets are used as independent variables. The results indicate that corporate social expenditure have negative effect on accounting conservatism while the other independent variables such as age of firm, return on assets, depreciation cost ratio and cash flow have positive effect on accounting conservatism.

Shehu (2015) examines the impact of corporate social responsibility on the financial performance of quoted conglomerates in Nigeria between the period 2006 and 2011. Corporate social responsibility is represented by community performance, employee relations and environmental management system while financial performance is captured by return on asset. The results indicate that employee relations and community performance have positive and significant impact on return on asset while environmental management system exerts negative effect on return on asset. The study maintains that corporate social responsibility plays a significant role on the profitability of conglomerates in Nigeria.

Fodio, Ahmad and Oba (2013) examine the effect of corporate social responsibility on firm value of quoted firms in Nigeria between the period - 2004 to 2007. A total of 35 firms in the financial services listed on the Nigerian Stock Exchange are selected as sample for the study. Firm value is represented by Tobin’s Q while corporate social responsibility is captured by human resource management, community development and environmental performance. Also, firm size, firm growth rate, leverage and dividend payment are employed as control variables. The results indicate that proxy variables for CSR have significant positive effect on the value of selected firms.

Rebecca, Felix and Onyeisi (2015) explore the effect of conservatism on the value relevance of quoted firms in Nigeria. The sample of the study consists of 30 firms drawn from 10 industries. The data for the study were obtained from the financial reports of selected firms between 2005 and 2010. Value relevance of firms is captured by earnings per share while average annual accruals, market-based conservatism, non-operating accruals and market value of net operating assets. The results showed that market-based conservatism and average annual accruals have negative effect on value relevance of selected firms while net operating accruals and market value of net operating assets have positive effect on value relevance of selected firms.

2.4 Gap in Literature

Almost all the studies reviewed are directed to examine the effect of corporate social responsibility on either profitability or financial performance of organization. Furthermore, other studies investigated the effect of accounting conservatism on firm value or value relevance of firms. To the best of the researcher’s knowledge, no studies have been conducted to investigate the effect of corporate social responsibility on accounting conservatism of firms in Nigeria. To this end, the study covers gap in literature by examining the effect of corporate social responsibility on accounting conservatism in banking industry in Nigeria.

3.1 METHODOLOGY

The study adopts the quantitative research design. Quantitative research design is the use of statistical and computational techniques to empirically investigate an observable phenomenon. Out of these four components, the experimental design is the most appropriate for the study because it uses scientific method to establish cause–effect relationship between two or more variables (Creswell, 2013).

The population of the study consists of all deposit money banks in Nigeria. There are twenty-two (22) listed deposit money banks in Nigeria as at 2018 (CBN Economic and Financial Review, 2018). The Taro–Yamane sample size determination is adopted to ascertain the appropriate sample size based on the study population at 95% confidence interval and 5% error of tolerance. A sample size of 9 banks was selected

The study adopts the judgmental sampling technique to select nine (9) deposit money banks in Nigeria. The factors considered for the selection of sampled banks include: banks who operated within the period of study; banks who included their expenditures on corporate social responsibilities in their financial statements within the period of study and those whose financial statements were published and available for the period of study.

The study adopts secondary data; the data are sourced from the published financial statements of selected banks between 2011 and 2016. The variables of interest are computed from the published financial statements of selected banks.

3.5 MODEL SPECIFICATION

The specific objectives of the study are to examine the effect of societal expenditure, employee relations expenditure and environmental management expenditure on accounting conservatism of selected banks in Nigeria. The study employed the panel regression in the analysis of data. The conceptual model can be expressed as:

$$Y_t = \beta_0 + \beta_1 X_{it} + \beta_2 Z_{it} + \mu$$
Where:

\( Y_t \) = Dependent variable

\( X_{it} \) = Independent variable

\( Z_{it} \) = Control variable

\( \beta_0 \) = Constant term of the model

\( \beta_1 \) = Regression coefficient of independent variable

\( \beta_2 \) = Regression coefficient of dependent variable.

\( \mu \) = Error term

The dependent variable is accounting conservatism (CON) represented by book value to market value of equity. The independent variable is corporate social responsibility measured by societal expenditure (SOE), employee relations expenditure (ERE) and environmental management expenditure (EMR). The control variables adopted in the model are size of firm (natural logarithm of total assets) and leverage (ratio of total liabilities to total assets).

**Model 1: Impact of Societal Expenditure on Accounting Conservatism**

\[ \text{CON}_t = \beta_0 + \beta_1 \text{SOE}_{it} + \beta_2 \text{SIZE}_{it} + \beta_3 \text{LEV}_{it} + \mu \]

**Model 2: Impact of Employee Relations Expenditure on Accounting Conservatism**

\[ \text{CON}_t = \beta_0 + \beta_1 \text{ERE}_{it} + \beta_2 \text{SIZE}_{it} + \beta_3 \text{LEV}_{it} + \mu \]

**Model 3: Impact of Environmental Management Expenditure on Accounting Conservatism**

\[ \text{CON}_t = \beta_0 + \beta_1 \text{EME}_{it} + \beta_2 \text{SIZE}_{it} + \beta_3 \text{LEV}_{it} + \mu \]

The study is delineated to deposit money banks in Nigeria and covers a six-year period ranging from 2011 to 2016. In addition, analysis of data is subjected to descriptive statistics and pooled ordinary least square technique. Ethical issue that is taken into consideration during the course of data collection is confidentiality. The financial statements of selected banks are used exclusively for academic purpose.

**4.0 DATA PRESENTATION, ANALYSIS AND INTERPRETATION**

**4.1 Descriptive Analysis**

**Table 4.1: Descriptive Analysis of Variables**

<table>
<thead>
<tr>
<th></th>
<th>CON</th>
<th>SOE</th>
<th>ERE</th>
<th>EME</th>
<th>SIZE</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.867037</td>
<td>109.7217</td>
<td>29.2093</td>
<td>16.97019</td>
<td>17.21723</td>
<td>0.467667</td>
</tr>
<tr>
<td>Median</td>
<td>0.850000</td>
<td>91.15500</td>
<td>27.62000</td>
<td>17.09000</td>
<td>16.67271</td>
<td>0.485500</td>
</tr>
<tr>
<td>Maximum</td>
<td>1.130000</td>
<td>264.1200</td>
<td>52.89000</td>
<td>25.68000</td>
<td>21.28304</td>
<td>0.643000</td>
</tr>
<tr>
<td>Minimum</td>
<td>0.650000</td>
<td>45.65000</td>
<td>7.880000</td>
<td>9.500000</td>
<td>13.11746</td>
<td>0.137000</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>0.124894</td>
<td>55.41478</td>
<td>11.53574</td>
<td>3.971977</td>
<td>2.824925</td>
<td>0.107267</td>
</tr>
<tr>
<td>Skewness</td>
<td>0.342097</td>
<td>1.595942</td>
<td>0.128275</td>
<td>0.266888</td>
<td>0.062945</td>
<td>-1.105516</td>
</tr>
<tr>
<td>Kurtosis</td>
<td>2.260606</td>
<td>4.922707</td>
<td>2.345220</td>
<td>2.605215</td>
<td>1.203195</td>
<td>4.463621</td>
</tr>
<tr>
<td>Jarque-Bera</td>
<td>2.283356</td>
<td>31.24108</td>
<td>1.112749</td>
<td>0.991738</td>
<td>7.299802</td>
<td>15.81941</td>
</tr>
<tr>
<td>Probability</td>
<td>0.319283</td>
<td>0.000000</td>
<td>0.573284</td>
<td>0.609041</td>
<td>0.025994</td>
<td>0.000367</td>
</tr>
<tr>
<td>Sum</td>
<td>46.82000</td>
<td>5924.970</td>
<td>1576.850</td>
<td>916.3900</td>
<td>929.7307</td>
<td>25.25400</td>
</tr>
<tr>
<td>Sum Sq. Dev.</td>
<td>0.826726</td>
<td>162752.3</td>
<td>7052.880</td>
<td>836.1597</td>
<td>422.9507</td>
<td>0.609832</td>
</tr>
</tbody>
</table>

| Observations | 54 | 54 | 54 | 54 | 54 | 54 |

Table 4.1 presented the summary statistics of conservatism, societal expenditure, employee relations expenditure, environmental management expenditure, leverage and firm size. The results above reported the mean, median, standard deviation, skewness, Kurtosis, Jarque-Bera statistic, probability, sum, sum of squared deviation and number of observations.

Conservatism, which is measured by the book value of shares to market value of shares, averaged 0.87 with a standard deviation of 0.12. This connotes that sampled banks have an acceptable level of conservatism in their financial reports during the periods of investigation as the average conservatism within the reviewed years is less than one. The mean and standard deviation of societal expenditure are N109.72 million and N55.41 million respectively. Societal expenditure ranged between N45.65 million and N264.12 million. The mean and standard deviation of employee relations expenditure are N29.20 million and N11.54 million respectively. Employee relations expenditure ranged between N7.88 million and N52.89 million. The mean and standard deviation of environmental management expenditure are N16.97 million and N3.97 million respectively. Environmental management expenditure ranged between N9.50 million and N25.68 million. Firm size was represented by the natural logarithm of banks’ total assets. The mean and standard deviation...
The distributions of the variables except leverage are positively skewed. In addition, the distribution of societal expenditure and leverage are heavily-tailed as their kurtosis exceeded three. On the other hand, the distribution of employee relations expenditure, environmental management expenditure, conservatism index and firm size are lightly-tailed as their kurtosis is less than three.

**Table 4.1.2: Correlation Matrix**

<table>
<thead>
<tr>
<th>Variable</th>
<th>SOE</th>
<th>ERE</th>
<th>EME</th>
<th>SIZE</th>
<th>LEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONV</td>
<td>1.00</td>
<td>0.14</td>
<td>0.17</td>
<td>0.04</td>
<td>-0.25</td>
</tr>
<tr>
<td>SOE</td>
<td>0.14</td>
<td>1.00</td>
<td>0.55</td>
<td>0.73</td>
<td>-0.39</td>
</tr>
<tr>
<td>ERE</td>
<td>0.17</td>
<td>0.55</td>
<td>1.00</td>
<td>0.28</td>
<td>0.05</td>
</tr>
<tr>
<td>EME</td>
<td>0.02</td>
<td>0.53</td>
<td>0.73</td>
<td>1.00</td>
<td>-0.23</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.04</td>
<td>0.06</td>
<td>0.21</td>
<td>0.29</td>
<td>1.00</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.25</td>
<td>-0.32</td>
<td>-0.39</td>
<td>-0.22</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 4.2 presented the correlation coefficients between the variables. Correlation coefficient indicates the strength of linear interrelationship between two variables. The result showed that conservatism is positively related with societal expenditure, employee relations expenditure, firm size, environmental management expenditure but negatively related with leverage. This implies that conservatism and societal expenditure, employee relations expenditure, size and environmental management expenditure move in similar direction, but relates inversely with leverage. None of the correlation coefficients between the independent variables was high enough to warrant the problem of multicollinearity.

### 4.2 Hypotheses Testing

**Panel Data Analysis**

The pooled ordinary least square technique tends to produce misleading results because it does not capture heterogeneity between cross-sections. The pooled ordinary least square represses the heterogeneity that may exist among the subjects and across time in the sample as the individuality of each subject is subsumed in the disturbance term. The fixed and random effect-models are prominent in panel data analysis. The fixed effect model estimate capture heterogeneity across subjects but assumes heterogeneity to be time-invariant. In principle, random-effect assumes that observed characteristics that time-invariant heterogeneity is retained in the regression model, whereas in fixed-effect estimation, they are dropped.

The Hausman test is carried out to determine the appropriate estimation model to use. The Hausman test inquires whether there is significant difference between the fixed-effect and random-effect models. The probability of the Hausman test is compared with 0.05. If the probability value of the Hausman chi-square statistic is less than 0.05, it indicates there is significant difference between the fixed-effect and random-effect model, and as such the fixed-effect model is appropriate. On the other hand, if the probability value of the Hausman chi-square statistic is greater than 0.05, it connotes that there is no significant difference between both models, and as such the random-effect is accepted.

**Model One: Impact of Societal Expenditure on Accounting Conservatism**

<table>
<thead>
<tr>
<th>Test Summary</th>
<th>Chi-Sq. Statistic</th>
<th>Chi-Sq. d.f.</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period random</td>
<td>2.7090</td>
<td>3</td>
<td>0.4387</td>
</tr>
</tbody>
</table>

The Hausman chi-square statistic is 2.71 with probability value of 0.4387. Since the probability value is greater than 0.05, it connotes that the fixed-effect and random-effect models is not significantly different. As such, the random effect model is accepted.

**Table 4.2.1: Impact of Societal Expenditure on Accounting Conservatism of Selected Deposit Money Banks( Random-Effect Estimation)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.681522</td>
<td>0.133930</td>
<td>5.088641</td>
<td>0.000</td>
</tr>
<tr>
<td>SOE</td>
<td>0.000567</td>
<td>0.000321</td>
<td>1.768670</td>
<td>0.083</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.003336</td>
<td>0.005971</td>
<td>0.558458</td>
<td>0.579</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.386405</td>
<td>0.165627</td>
<td>-2.332987</td>
<td>0.0237</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.120663</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.067903</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob (F-Statistic)</td>
<td>0.089962</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The result above presented the random-effect estimation of the impact of societal expenditure on conservatism. The coefficient of determination indicates that 12% of the variation in conservatism is explained by societal expenditure, firm size and leverage. This connotes that the explanatory variables have weak predictive influence on conservatism. The constant term of the model indicates that the ratio of the book-value of shares to market-value of shares would be 0.68 when the explanatory variables are assumed to be zero. The regression result showed that firm size has a positive but insignificant effect on conservatism. Also, leverage exerted a significant negative effect on conservatism. The coefficient and probability value of societal expenditure have a positive but weak impact on conservatism.

The coefficient and probability value of societal expenditure are 0.0001 and 0.08 respectively. Since the probability value is greater than 0.05, it indicates that societal expenditure has a positive but negligible impact on accounting conservatism in Nigerian banking industry. To this end, the null hypothesis is accepted that societal expenditure has no significant effect on accounting conservatism in banking industry in Nigeria.

### Model Two: Impact of Employee Relations Expenditure on Accounting Conservatism

The Hausman chi-square statistic stood at 1.554 with a probability value of 0.6698. Since the probability value is greater than 0.05, it therefore suggests that there is no significant difference between the fixed-effect and random-effect models. As such, the random-effect estimation is appropriate.

### Table 4.2.2: Impact of Employee Relations Expenditure on Accounting Conservatism of Selected Deposit Money Banks(Random Effect Estimation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.843285</td>
<td>0.165043</td>
<td>5.109472</td>
<td>0.0000</td>
</tr>
<tr>
<td>ERE</td>
<td>0.001140</td>
<td>0.001679</td>
<td>0.679071</td>
<td>0.5002</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.003345</td>
<td>0.006325</td>
<td>0.528813</td>
<td>0.5993</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.245140</td>
<td>0.176759</td>
<td>-1.386862</td>
<td>0.1716</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.073189</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.017580</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob (F-Statistic)</td>
<td>0.279530</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durbin-Watson stat</td>
<td>0.692019</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The result above showed the random-effect estimation of the effect of employee relations expenditure on accounting conservatism. The coefficient of determination indicates that the explanatory variables-employee relations expenditure, firm size and leverage explained 7% variation in accounting conservatism. The constant term of the model connotes that the ratio of the book-value of shares to market-value would be 0.84 given that the explanatory variables are assumed to be zero. The result revealed that firm size has a positive but insignificant effect on accounting conservatism while leverage has a negative but insignificant effect on conservatism. Also, employee relations expenditure has an insignificant positive effect on accounting conservatism.

The coefficient and probability value of employee relations expenditure are 0.0011 and 0.50 respectively. Since the probability value of employee relations expenditure is greater than 0.05, it indicates that it has no robust impact on accounting conservatism. Thus, the null hypothesis is accepted that employee relations expenditure has no significant effect on accounting conservatism in banking industry in Nigeria.

### Model Three: Impact of Environmental Management Expenditure on Accounting Conservatism

The Hausman chi-square statistic stood at 2.02 with a probability value of 0.57. Since the probability value is greater than 0.05, it indicates that there is no significant difference between fixed-effect and random-effect models. As such, the random-effect estimation is appropriate.
Table 4.2.3: Impact of Environmental Management Expenditure on Accounting Conservatism of Selected Deposit Money Banks (Random-Effect Estimation)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>T-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>0.761109</td>
<td>0.180988</td>
<td>4.205294</td>
<td>0.0001</td>
</tr>
<tr>
<td>EME</td>
<td>0.000435</td>
<td>0.004692</td>
<td>0.092740</td>
<td>0.9265</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.002289</td>
<td>0.006441</td>
<td>0.355305</td>
<td>0.7239</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.294965</td>
<td>0.166800</td>
<td>-1.768377</td>
<td>0.0831</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.064353</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjusted R-squared</td>
<td>0.008214</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prob (F-Statistic)</td>
<td>0.694208</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Durbin-Watson stat

Source: Researchers’ Panel Regression Result

The result above showed the random-effect estimation of the impact of environmental management expenditure on accounting conservatism. The coefficient of determination revealed that 6% of the variation in conservatism is explained by the explanatory variables – environmental management expenditure, firm size and leverage. The constant term of the model indicates that the ratio of book value of shares to market value would be 0.76 on the axiom that the explanatory variables are zero. The result revealed that firm size and leverage have positive and negative impact on conservatism, but their effects are negligible. Also, environmental management expenditure was found to have insignificant positive impact on accounting conservatism.

The coefficient and probability value of environmental management expenditure are 0.0004 and 0.93 respectively. This indicates that environmental management expenditure has little impact on accounting conservatism given the fact that its probability value is greater than 0.05. To this end, the null hypothesis is accepted that environmental management expenditure has no significant effect on accounting conservatism in banking industry in Nigeria.

4.3 Discussion of Findings

Findings from the random-effect estimation indicated that corporate social responsibility surrogated as societal expenditure, employee relations expenditure and environmental management, has no strong impact on accounting conservatism in selected deposit money banks in Nigeria. This connotes although CSR contributes to conservatism, the effect of its magnitude is meager. The negligible impact of CSR could be attributed to the fact that Nigerian deposit banks are not fully complying with the code of corporate social responsibility. The code of corporate social responsibility mandates every registered organization to contribute to the economic, social and environmental development of their host communities. From the available data on accounting conservatism, which is represented by the ratio of book value of shares to market value, indicates that selected deposit money banks have a book value of shares to market value ratio less than one, which indicates a poor conservative practice. As stated above, out of the nine banks, only one- Union Bank had an acceptable level of conservative practice between 2011 and 2016. This further buttresses the assertion that Nigerian deposit money banks are underperforming in conservative practices.

In another sense, some studies have advocated for the abandonment of corporate social responsibility amongst private enterprises. Arguments have been ongoing on the necessity of corporate social responsibility. Scholars such as Aras, Aybals and Kutlu (2010) contended that CSR should be shunned by private firms because it is a waste of time, finance and efforts and emblematises the dissipation of organizational resources to unprofitable and unproductive projects and also because they have no legal and democratic justifications to pursue those programmes. On the other hand, some sets of scholars such as Cheng and Kang (2016) and Karsalari, Agahee and Ghasemi (2017) argued that CSR is important objectives every firm must achieve as it tend to enhance profitability; conservative practices and builds internal and international reputation. The non-significance of the CSR on accounting conservatism can equally be linked to the fact that deposit money banks, being private firms, are preoccupied to achieving the two most important organizational objectives which are maximization of profit and maximization of shareholders’ wealth.

However, the findings of the study is consistent with the empirical results of Rebecca, Felix and Onyeisi (2015) who discovered that corporate social responsibility has positive impact on accounting conservatism.
amongst Nigerian quoted firms. Furthermore, the finding aligns with the result of Hayn (2009) who found no significant relationship between corporate social responsibility and discretionary accruals among Indonesian mining companies. On the other hand, the results negated the findings of Karsalari, Aghae and Ghasemi (2017) who found that corporate social expenditure has adverse effect on conservatism among listed firms in Tehran Stock Exchange.

5.1 CONCLUSION
The study provided an empirical evidence of the effect of corporate social responsibility on accounting conservatism among Nigerian deposit money banks. Conservatism in this regard is represented by the ratio of book value of shares to market value of share while corporate social responsibility was surrogated by expenditure on societal development, employee welfare and environmental management. Based on the findings, the study concluded that although corporate social responsibility promotes accounting conservatism in the Nigerian banking sector, but its impact is not robust.

5.3 RECOMMENDATIONS
In an attempt to improve conservative practices in the Nigerian banking sector through corporate social responsibility, the following recommendations are proposed:
1. Efforts should be made to promote understanding of managers, suppliers of corporate capital (shareholders) and stakeholders in the application of desirable conservative practices in the Nigerian banking sector.
2. Given that the effectiveness of the application of various types of conservatism in the financial statements of banks' stock value, bank managers are encouraged to make reasonable assumptions about the preparation of financial statements and to refrain from providing many conservative reports.
3. Users of financial statements are advised not to totally rely on the financial statements of banks in their decisions, but to consider the banks’ owners and other social responsibility features.
4. As corporate social responsibility has cost implications linked up with it, there is need for the employees to become more effective and efficient in discharging their functions. By being effective, banks can provide services at least cost which by extension implies that part of the money saved could be used in meeting responsibility issues.
5. The financial reporting council and other allied bodies should ensure clarity and provide rules with probably less discretionary tendencies for management to manipulate. Also, government should come up with clearly defined regulations on how to go about social responsibility issues and should ensure its full implementation.

5.4 Contribution to Knowledge
To this end, the study covers gap in literature by examining the effect of corporate social responsibility on accounting conservatism in banking industry in Nigeria by using the ratio of book value of shares to market value of shares as a proxy to accounting conservatism.

REFERENCES


ABSTRACT
In examining the corporate social responsibility programmes of the Ogun Guangdong Free Trade Zone in Igbesa Community, Ogun State Nigeria, triangulation method of research which uses a combination of twin research instruments – in-depth interviews for representatives of the FTZ and questionnaire for the residents of Igbesa – were used in this study. For the in-depth interviews, the Corporate Communication and Chief Information Officers of FTZ were interviewed. Copies of questionnaire were distributed to three hundred and seventy six (376) respondents, drawn across Oguna, Igbe, Idomo & Osi Communities which make up the Igbesa Township. 355 copies of the questionnaires were duly filled and returned for analysis. Based on the returned copies of questionnaire and the interviews conducted with communication executives at Ogun Guangdong FTZ, result of the study shows that one major CSR project completed by the Ogun Guangdong Free Trade Zone is the Model Primary School known as Nigeria-China Friendship Primary Model School. The study also shows that the impact of CSR programmes executed by Ogun Guangdong Free Trade Zone is perceived to be low because some people believe that the projects barely have impact on the general populace. It was concluded that it is important to point that amidst other evolving facts, there is no gain saying that CSR has been a very good Public Relations strategy used by organizations to keep host community loyal. However, it was recommended that as a matter of urgency, stakeholders forum should be called so that the basic needs of the community would be the focus of the Ogun FTZ's CSR programme; furthermore, Ogun Guangdong FTZ should do a total overhaul of its approach to the use of corporate social responsibilities in building synergy with the host community and a proper channel of communication should be established, before undertaking any further projects.

Keywords: CSR, Public Relations, Ogun Guangdong FTZ, Community Relations.

1. Introduction
The belief that an organization exists not only for profit making for the shareholders but also serving the interests of all other stakeholders has culminated into the concept of corporate social responsibility (CSR). Over the years, businesses have continuously faced pressures from different stakeholders, such as employees' concerns to recognize some of their rights in the workplace, consumer pressures for the business to withhold price increase and to produce safe products, community and environmental pressures that the business operation does not threaten the safety of the local community (McWilliams & Siegel, 2001). Consequently, all of these pressures have contributed to making CSR more popular in the international business community.

Calls for a more cordial relationship between an organization and its immediate community so as to increase performance have risen in recent years. This, in the main, involves the gathering and dissemination of information about the operations of an organization to its publics. For an organization to do this, it must deploy public relations. Cutlip, Centre and Broom (1994) opine that public relations deals with the interdependence of organization and others in their environments.

Carroll (2000) proposes a popular four part definition of CSR, suggesting that corporations have four responsibilities (economic, legal, ethical and philanthropic responsibilities) to fulfill before being considered as good corporate citizens. CSR can sometimes be referred to as sustainability development and at such requires an organization to pay attention to the economic, environmental and social impacts of it activities (Gray, Owen, & Adams, 1996).

CSR as public relations tool has attracted heightened attention throughout the world. Stakeholder expectations of business have increasingly ranged from maximum profits to strong levels of CSR. The area
defined by proponents of CSR covers a wide range of issues, such as employee relations, human rights, corporate ethics, community relations and the environment. Generally, researchers looked at more importantly the areas of employee relations, business contacts (customers, suppliers), environment, ethics and human rights. It will suffice to note here that while the primary role of business is to produce goods and services that society needs, there is also necessity for interdependence between business and host community for a stable environment (Osho, 2008).

Globally, organizations are concerned with value re-investment into the society in appreciation of the contributions of the society to their growth, sustenance and survival. Hence, attention is further directed to the potential consumers as well as non-consumers of corporate offers as marketing concept philosophies are integrated into societal marketing concept as means of achieving desired level of social responsibility. Given this as the thrust of operations, corporate attention is increasingly being given to issues like equal employment opportunity. Thus, it is easier for corporation to be re-oriented about the philosophy of CSR.

Dangers associated with the neglect of social responsibility obligation by business organizations represent a cost which can be envisioned in monetary value lost in man-hour when production is stopped forcefully by the local community that host an organization. Instances of this abound in the Niger Delta region of the country where many local and multinational oil companies operate. There is always colossal loss in both natural and man-made resources to business organizations when they neglect social responsibility and ethics in the management of the environment where they operate. The cost involved when organizations are not socially responsible is multifaceted. First is cost in cash outlay, and the other is cost of disruptive action by the community forcing social responsibility on the organization (Gbadamosi, 2016).

In other words, the concept of CSR in business connotes an abiding interest of the entrepreneur in the welfare of the environment where the commercial activities operate. The idea implies that business attached a great deal of importance to the society as a whole, along the corporate interest. Hence, it is the commitment of business, to contribute to sustainable socio economic development in its area of operation.

Statement of the Problem
Corporate social responsibility among organizations particularly in Nigeria has been a highly contemporary and contextual issue to all stakeholders such as the government, the organizations and the public. The public has always contended that the payment of taxes and the fulfillment of other civic rights are enough grounds to have the liberty to take back from the society in terms of CSR undertaken by other stakeholders.

Going by the importance attached to corporate governance with a view to mitigate the challenges of neglecting their various communities of operation, it is in light of this that this study examines the CSR of companies in Ogun Guangdong Free Trade Zone in Igbesa, a suburb of Ado-Odo Ota Local Government Area of Ogun State, Nigeria.

Objectives of the Study
The specific objectives are to:

* Identify the specific CSR programmes deployed by companies in Ogun Guangdong Free Trade Zone in its host community
* Know the areas that have attracted mostly the CSR programmes of companies in Ogun Guangdong Free Trade Zone

Research Questions
The research questions that will guide investigations into this study include:

i. Which CSR programmes do companies in Ogun Guangdong Free Trade Zone provide for their host community?

ii. Which areas have attracted mostly the CSR programmes of companies in Ogun Guangdong Free Trade Zone?

2. Literature Review

Concept of CSR
The book entitled “Corporate Citizenship in Developing Countries” by Pedersen and Huniche (2006) contains a chapter about revisiting Carroll’s CSR Pyramid from a Nigerian perspective. Most of the researches on Carroll’s CSR Pyramid have been in an American context and in this report an attempt is made to look at how CSR manifests itself in a Nigerian context. In Nigeria, economic responsibility still get the most emphasis while philanthropy is given second highest priority, followed by legal and then ethical responsibilities.

Ajadi (2006), in a conference paper on Corporate Social Responsibility in Nigeria delivered at British Council conference on CSR in Nigeria, 2006, specifies some driving forces behind initiation in Nigeria:
The failure of centralized, government controlled economy to develop the country
• The extraordinary transaction cost to business of corruption and other failures of social capital
• The history of conflict and waste in the extractive industry exemplified by the Niger Delta saga
• The Nigerian population whose majority is under the age of 25 and is largely ignored despite the fact that they are critical to the survival and future prosperity of business and the country at large.
• The potential benefit of a commercially active and productive country of over 140 million potential consumers.

According to World Business Council for Sustainable Development (Lohman and Steinholtz, 2003) an active CSR work might include areas such as:
1 The management of the organization clearly declares its views and obligations towards the society and its stakeholders.
2 The organization develops and implements clear policies.
3 The organization has rules for purchasing including social and environmental concerns.
4 The organization reduces its "ecological footprints", both in production and in the process of production.
5 The organization has objectives with regard to environmental and social concerns.
6 The organization shows an active engagement with regard to the development of its local society.
7 Consumers are educated on how products ought to be used.
8 The organization informs about all its different business areas in a transparent manner.

Profile of Ogun-Guangdong Free Trade Zone (FTZ)
As contained in a quarterly progress report (2017), the Ogun-Guangdong Free Trade Zone was founded in 2008. It is one of the companies in the zone in Igbesa. It is 28km away from Apapa wharf, the biggest port in West Africa, 23km away from Ikeja International Airport, Lagos. The planning area for the Free Trade Zone covers 100 square kilometers with a 99-year of working partnership (Quarterly Progress Report, 2017). The start-up phase covers 2.24 square kilometers. The Free Trade Zone carries on the torch of the function of the economic and trade center of Lagos, and makes the best use of the resources from Ogun State geographical relationships (land and labor force), and takes excellent example of 20-year developing experience of Guangdong, industries being the backbone, and including logistics, researching and developing, convection and exhibition, and entertaining (Quarterly Progress 2017 of Ogun-Guangdong FTZ).

The industrial orientation of the Free Trade Zone is focused on the area of light industry furniture construction materials, hardware and wood processing, and the raw material processing and develops in the parallel with the engineering, marketing and the business of commerce.

There are already 45 registered enterprises inside the Free Trade Zone, of which 25 enterprises have been under operation, and 6 enterprises are under construction. The operations of the companies cover printing, carton production, furniture, steel pipes, steel structures, ceramics and batteries, to mention a few.

Theoretical Review
This research work is therefore anchored on two theories – Legitimacy and Quakers theories.

Legitimacy Theory
Legitimacy theory is derived from the concept of organizational legitimacy, which has been defined by Dowling and Pfeffer (1975) cited in James, Suresh and Leanne (2006) as "a condition or status which exists when an entity's value system is congruent with the value system of the larger social system of which the entity is a part. When a disparity, actual or potential, exists between the two value systems, there is a threat to the entity's legitimacy".

Legitimacy theory posits that organizations continually seek to ensure that they operate within the bounds and norms of their respective societies. Gehan and Naser (2015) define it as a conceptual framework based on the existence of social and exchangeable relationships between a company and the community. This framework aims to explain why companies engage in particular social and environmental disclosure, and how they do that, as well as, what impact environmental disclosure has on the public and community.

This suffices that legitimacy theory relies on the notion that there is 'social contract' between a company and the society in which it operates. The social contract is used to represent the myriad of expectations society has about how an organization should conduct its operations (Deegan, 2000). Specifically, it is considered that an organization's survival will be threatened if society perceives that the organization has breached it social contract (Deegan, 2002).

The objectives of this theory can be identified as; describe the relationships between a company and the community; explain companies' motivations for social and environmental disclosures; present how
companies can use legitimacy strategies; determine the impacts if social and environmental disclosures on the public and society (Gehan & Naser, 2015). Furthermore, this theory assumes that a company’s survival depends on obtaining and maintaining social approval. Also, it assumes that a company’s ultimate survival may depend on developing and maintaining a recognizable image and favorable reputation. Within the context of this study, legitimacy theorists advocate that businesses maintain their own deal of social contract with societies by operating in a way that the cultures and wellbeing of their host communities are maintained. In other words, legitimacy theory explains that companies should be responsible to participate in programmes that engender social, economic and political progress of the society. A major form of these corporate programmes is CSR.

**Quakers Theory**

Historically, the Religious Society of Friends, better known generally as Quakers, were formed during the ferment of the English Civil War and Commonwealth period, as an explicitly Christian and intensely evangelical religious group, dedicated to the idea that they had discovered anew the one true Christian religion and that, given time, the whole world would eventually agree. A number of Quaker missionaries, called collectively 'The Valiant Sixty', and consisting of both men and women (highly unusual for the time) went forth all over England and to other parts of the world, including a visit to the Ottoman Sultan, with the avowed desired to convert him to Quakerism. The two prominent Quakers of the early days were George Fox and James Nayler, who were also rivals in the leadership role of the early days. Quakers became more respectable in the late 17th century (often, the passing of the Toleration Act in 1689, which made it possible for Quakers to affirm, instead of swear, and which tolerated them and other groups (is cited as a turning point) and, as a result, were concerned for their individual and corporate reputations.

The minute books of a Quaker meeting at the time studied are framed in ways that are difficult to understand for those who have not experienced the Quaker form of conducting business. The theory strives to build relationships and political structures that can contain and resolve conflict and to abstain from relationships and political structures that are unjust and exploitative. Most Quakers are committed pacifists who oppose both the chauvinism of nationalists Movement and militant revolutionary movements that seek to destroy the older in favor of the new. Quakers theory advocates that businesses should ensure peace in the society by not being self-centered, chauvinistic, and exploitative. This will ensure a conflict-free relationship between them and their host communities.

3. **Methodology**

This study adopted triangulation method of data gathering. This is the combination of two methods. The mixed methods consisted of survey and in-depth interview. The choice of interview in this design was hinged on the need to get internal information from the organizations within the FTZ. Hence, that made the study population two categories. Category A was made up of the residents of Igbesa area in Ado-Odo/Ota Local Government of Ogun State, Nigeria. Category B was made up of senior personnel in Ogun-Guangdong Free Trade Zone, Igbesa. The host community of Ogun-Guangdong Free Trade Zone, is a major industrial town in the LGA.

Three hundred and seventy-six (376) respondents were drawn for the purpose of this study, while Igbesa community was stratified into four quarters name Ogona, Igbe, Idono and Osi with each using an online sample calculator. Online sample calculator is a scientific and contemporary method of calculating sample size in every part of the world. The choice of the platform was informed by the need to get a meaningful sample size needed for the study. Two in-house staff members of the Ogun-Guangdong Free Trade Zone were interviewed. The two were Chief Information Officer and Corporate Communication Officer. Copies of questionnaire were administered on respondents on face-to-face basis by the researcher and two (2) research assistants, trained by the researcher. Respondents filled copies of the questionnaire on the spot and returned same while a combination of telephone and face-to-face interview was used to conduct interview with two officers within FTZ in Igbesa, Ogun State, Nigeria.

4. **Data Analysis, Presentation &Discussion of Findings**

Out of all the 376 copies of the questionnaires, only 355 questionnaires were validly filled and retrieved from the respondents thus putting the return rate to 94% return rate. Hence, the returned copies of questionnaires were supposedly enough to do justice to the study report. In discussing the major findings of the study, the research instruments raised for this study – interview guide and questionnaire were used. Corporate Communication and Chief Information Officers of Ogun-
Guangdong Free Trade Zone, Igbesa were targeted for the in-depth interviews while questionnaire was administered on residents of Ogun-Guangdong FTZ. Presentation of the interview report is done in prose format while results of the survey conducted are analyzed using simple percentage and table.

**RESEARCH 1: Which CSR programmes do companies in Ogun Guangdong Free Trade Zone provide for their host community?**

This research question is analyzed making reference to data on questionnaire items 1 and 2. Adaptations from the interviews conducted were also made.

**Questionnaire Item 1: Respondents’ view on percentage of impact of the CSR programme of Ogun Guangdong Free Trade Zone**

Respondents score the impact of CSR programmes executed by Ogun Guangdong Free Trade Zone low; they believe that the projects barely have impact on the members of the host communities. While a few projects such as the school project can be seen and the impact felt, some other project ideas which have been started do not have near solution to the various challenges of the area and her people. The respondents score the impact of the programmes mostly within the range of 32%, 34%, and 44%.

**Questionnaire Item 2: Respondents’ thoughts on area of CSR programme executed by Ogun Guangdong FTZ for the benefits of the host community**

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>283</td>
<td>80</td>
</tr>
<tr>
<td>Infrastructural Dev.</td>
<td>64</td>
<td>18</td>
</tr>
<tr>
<td>Environment</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Arts and Culture</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Health</td>
<td>08</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>355</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Source: Field Study, 2018

In the table above, findings show that 80% of the respondents have benefited from “Education” programme of the Ogun Guangdong Free Trade Zone. This is immediately followed by “Infrastructural Development” which has 18% while “Health” has 2% respectively, areas such as “Environment”, “Entrepreneurship”, and “Arts & Culture” have not been impacted at all.

Evident from the survey analysis is that the impact of CSR programmes executed by Ogun Guangdong Free Trade Zone is low; the people believe that the projects barely have impact on the general populace. While a few projects can be seen by the people, the bulk of the projects executed by the company do not provide solution to the various challenges of the area and her people. Meanwhile, education programme of Ogun Guangdong FTZ has had visible impact; another super important CSR programme is “Infrastructural Development” in terms of road construction.

According to the interviews conducted, the two officials of the Ogun Guangdong FTZ pointed out that much has been done in the area of CSR for the people of Igbesa and its adjoining communities, adding that being a body that operates in the area; it is incumbent on them to ensure that they cater for the people in the local communities. The Corporate Communication Officer said a lot of CSR projects have been embarked upon. According to him, apart from the school project, another is road project that has been done. He added that they had plans to open a standard hospital in Igbesa, considering the fact that “as big as Igbesa is, the nearest hospital to the area is at Ota and it is 20km away while the road is not motorable”. In addition, the Chief Information Officer noted that the Igbesa town has been quite homely to them. He added that the community’s posture to the organization has made them elevate the standard of living of the community – economically and socially. In his words,

“I will say it clearly that on our own end here, we have established a primary school named Nigeria China Friendship Primary Model School which we believe it can elevate, motivate, and inspire the younger ones to go to school. For us, we can see the differences between the private school and public school but through this our primary school, which gives the people access to free education, we have been able to show compassion for our host community. We also recently started the maintenance of the Lusada and Igbesa roads because if you come down to that road you will find out that the road is in a very bad shape for years and since the government is not doing anything to contribute or come ahead for
It can be safely concluded that though CSR programmes have been done by Ogun Guangdong Free Trade Zone, notably in the area of education and infrastructural development, the people of the area look forward to more intervention from the companies. Result of this study also suggests that it is possible the basic need of the host communities have not been factored into project consideration and execution by the zone’s management. However, recent personal observation of the CRS activities of Ogun Guangdong FTZ shows that ground is currently being prepared for the construction of general hospital at Itekun Road in Igbesa Township. Also, Lusada-Igbesa road is as well under construction.

To say organization which enjoys the best of credibility among the people in any community will get best of their support is not to say the obvious. Perhaps this is why Raufu (2014:107) alludes that “Good Corporate Image matters and good corporate social responsibility engenders it”. This position affirms the report of the study at hand, having seen that Ogun Guangdong FTZ has been able to make a case for its CSR effort by establishing a school for the people of Igbesa town.

**RESEARCH 2: Which areas have attracted mostly the CSR programmes of companies in Ogun Guangdong Free Trade Zone?**

In answering this research question, reference is made to questionnaire items 3 and 4. Thoughts shared during the interviews conducted with the Ogun Guangdong FTZ communication executives are also relied on.

**Questionnaire Item 3: Respondents’ view on the CSR programme of Ogun Guangdong Free Trade Zone that has been felt the most**

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>159</td>
<td>46</td>
</tr>
<tr>
<td>Infrastructural Dev</td>
<td>140</td>
<td>39</td>
</tr>
<tr>
<td>Environment</td>
<td>15</td>
<td>4</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>08</td>
<td>2</td>
</tr>
<tr>
<td>Arts and Culture</td>
<td>12</td>
<td>3</td>
</tr>
<tr>
<td>Health</td>
<td>21</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>355</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Field Study, 2018*

In the table above, 46% of the total respondents believe the presence of Ogun Guangdong Free Trade Zone has been felt the most in the area of “Education”. This is followed by “Infrastructural Development” which was chosen by 39% of the respondents. Areas such as “Environment”, “Entrepreneurship”, “Arts and Culture” and “Health” have 4%, 2 %, 3% and 6% representations on the table respectively.

**Questionnaire Item 4: Respondents’ Perception on area of CSR programmes executed by Ogun Guangdong Free Trade Zone for the benefits of the host community**

<table>
<thead>
<tr>
<th>Option</th>
<th>Frequency</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>283</td>
<td>80</td>
</tr>
<tr>
<td>Infrastructural Dev</td>
<td>64</td>
<td>18</td>
</tr>
<tr>
<td>Environment</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Arts and Culture</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Health</td>
<td>08</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>355</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

*Source: Field Study, 2018*

In the table above, 80% of the respondents have benefited from “Education” programme of the Ogun Guangdong Free Trade Zone. This is followed by “Infrastructural Development” with 18% while “Health” has 2 % respectively. Areas such as “Environment”, “Entrepreneurship”, and “Arts & Culture” were not identified by the people as having been of benefit.

Interview with the Ogun Guangdong FTZ Corporate Communication Officer reveal that apart from education, maintenance is an area the agency is known for. This is as the zone built a primary school for the community, which charges less than the normal private and public school do. Similarly, the Police Post in the area has become a full operating police station. These projects are mostly in two communities - Igbesa and Ejila-Awori.
Responding to reasons why other areas have not been given consideration, the Corporate Communication man said "we decided to focus more on education because we believe that it is very paramount to us. Another area of interest is health among others which cannot be ignored." He clarified. Meanwhile, the Chief Information Officer added that they also employ people from Igbesa, so as to grow the economy of the area and her people, as many of the indigenes now have works to do. In addition to this, results of the survey data show that the CSR project that is mostly visible to the people is education. One of the table shows that 59% of the respondents believe ‘Education programme’ of the zone has been visibly impacted. Infact, two indigenes of Igbesa recently got scholarship to study in a tertiary institution in China. This is in validation of the giant stride in education. Furthermore, construction of the major road, from Oba Adeshola Market to (Lusada) Igbesa and a modern police station were discussed as parts of their proposal for the next phase of their CSR projects. Presently, works are ongoing on the Lusada-Igbesaroad project.

A study by Africa, Krishna and Tendal (2014) examined the role of corporate social responsibility on corporate brand positioning in the printing and packaging industry in Zimbabwe. The study shows that CSR programmes are developed based on the need of the host community or financial strength of the organization considering the PR programme. It added that four areas of corporate social responsibility viz-a-viz: enterprise, education, art and culture, environment, among others are popular and are used by most organizations. Considering the report of the present study, one can infer that CSR programmes of Ogun Guangdong FTZ are in line with the popular practice in terms of programme focus. Various literatures attest to this.

Summary of Findings
With the attendant growth of CSR and popularity among corporate organizations, the findings of this study summarily show that;

i. Corporate Social responsibility projects are people oriented and usually community based;
ii. CSR is essential to sustenance of peace for co-existence between organizations and host communities;
iii. A lot of corporate social responsibility projects have been proposed by Ogun Guangdong FTZ including construction of a general hospital, scholarships and more importantly,
iv. A Model Primary School, named Nigeria China Friendship Primary Model School, is currently run by Ogun Guangdong FTZ;
iv. The impact of CSR programmes executed by Ogun Guangdong Free Trade Zone is low; the people believed that the projects barely have impact on the general populace;
vi. Education programme of the zone has visible impact, courtesy, Ogun-Guangdong Free Trade Zone; this is followed by Infrastructural Development and health;
vi. The CSR programmes of Ogun-Guangdong is believed by the people of the community not to be good enough or favourable.

v. Igbesa and Ejila-Awori are two major areas that have benefited from the Ogun-Guangdong FTZ CSR projects Igbesa Community is presently the only community benefiting from CSR projects of Ogun-Guangdong FTZ, Igbesa, thereby Ejila Awori whose larger parcel of land had been acquired.

5. Conclusion and Recommendations
Having examined the relationship between CSR and host communities, particularly Ogun Guangdong FTZ, it is important to point out that amidst other interesting evolving facts, there is no gain saying that CSR has been a very good Public relations strategy used by organizations to keep host community in close range. To say it is one of the reasons for peaceful atmosphere in workplace is not to say the least. Though a few challenges are obvious despite acceptance of the practice.

Based on the findings of the study and direct observation of the practice of image makers, Public relations practitioner and corporate organizations, the following are hereby recommended;

** As a matter of urgency, stakeholders forum should be called so that the basic needs of the community is properly placed and addressed, so the people would not see Ogun Guangdong FTZ as not sympathetic to their situation;

** Ogun Guangdong FTZ should do a total overhaul of its approaches to the use of corporate social responsibilities in building synergy with the host communities.

** A proper channel of communication should be established, solidified before undergoing any further projects.

** A good means of communication should be devised between the organization and the community so they could feel the pulse of the people on what best constitutes the CSR programme or project to them or favours the community dwellers.
The model school constructed currently run by Ogun Guangdong FTZ should be made totally free for the people with supplies of adequate facilities with academic materials and extra welfare packages in favour of staff apart from government subsidies. People for whom CSR project is meant should be consulted at all time. Use of town hall meetings, consultative forum, questionnaire or opinion poll may help in determining the needs of a people.

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EFFECT OF ENTREPRENEURIAL ORIENTATION ON THE PERFORMANCE OF SMALL AND MEDIUM ENTERPRISES (SMEs) IN GOMBE STATE, NIGERIA

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Abstract
Small and Medium Enterprises (SMEs) are regarded as the engine of growth and equitable development in developing economies by playing a significant role in economic growth, employment generation and poverty reduction. Entrepreneurial activities are crucial to the survival and performance of firms in achieving sustainable competitive advantage. The main objective of this study is to investigate the effect of entrepreneurial orientation on the performance of small and medium enterprises in Gombe State. The study is a cross sectional survey and primary data was collected through a self-administered questionnaire. Two hundred and eighty-three (283) questionnaires were administered to owners/managers of registered SMEs in Gombe State. Stratified and simple random sampling technique was utilized for sample selection. Structural equation model was used to test the hypotheses formulated for the study. Conclusions and recommendations are proffered based on the findings of the study.

Keywords: Entrepreneurial Orientation, Small and Medium Enterprises, Performance, Gombe.

1. Introduction
Small and Medium Enterprises (SMEs) play a key role in industrial economies around the world, generating employment and value added and contributing to innovation. SMEs are central to the efforts to achieving environmental sustainability and more inclusive growth (OECD, 2017). According to Sanusi (2013), SMEs are critical agents of economic transfer as they account for more than 50 percent of Gross Domestic Product (GDP) of developing economies. Also, they serve as source of innovation and technological development, supply of both human capital and raw materials to larger businesses and source of entrepreneurship and enterprises.

In Nigeria, SMEs contribute 48 percent to GDP for the last 5 years (National Bureau of Statistics; NBS, 2017) and provides an average of 50 percent to both employment generation and industrial output (Soludo, 2005). However, the activities of SMEs in Nigeria continue to be faced with numerous problems such as government policy, unstable business environment, lack of basic infrastructure, government bureaucracy, access to enterprise support services, access to financing, and low investment in Research and Development (R&D).

Most governments have identified the development of SMEs as a strategy to revive the economy. Programmes and measures embarked upon by the government to ensure effective performance of SMEs (growth and development) in Nigeria have witnessed limited success despite its effort to promote the sub-sector. Since independence, Government spends enormous resources on entrepreneurial and SMEs...
development programmes that have yielded poor results. White (2005) and Marlow (2005) argued that venturing into SMEs is very risky in Nigeria as the rate at which SMEs fail is very high. Several studies have shown that SMEs start up every year but a significant number of them fail by the first year of operation while majority shut down before their second year (Dickenson 1981; Almu 2004; Pearson, 2004). ViaPrag (2003) asserted that for every 100 start-ups, only 50 firms survive the first three years. Evidence has proven that on the average, one-third of every new enterprise fail at the end of the second year and 50-60 percent of these SMEs cannot manage to survive until the end of the seventh year (OECD, 2009).

Covin and Slevin (1991); Dess, Lumpkin, and Covin, (1997); Rauch, Wiklund, Frese and Lumpkin (2004) posited that the performance of firm is affected by the firm entrepreneurial orientation. In the same vein, Jesselyn (2012) opined that, SMEs find it difficult to achieve exceptional performance and sustainable growth and this was due to lack of innovative capacity as well as entrepreneurial orientation. Therefore, this study examined the effect of entrepreneurial orientation on the performance of SMEs in Gombe State, Nigeria.

The main objective of this study is to investigate the effect of entrepreneurship orientation on the performance of Small and Medium Enterprises (SMEs) in Gombe State. Other specific objectives include:

i. To analyse the effect of competitive aggressiveness on SMEs performance in Gombe State

ii. To examine the effect of autonomy on SMEs performance in Gombe State

iii. To investigate the effect of innovativeness on SMEs performance in Gombe State

iv. To assess the effect of proactiveness on SMEs performance in Gombe State

v. To examine the effect of risk-taking on SMEs performance in Gombe State

In line with the research objectives, the following hypotheses were formulated:

H₀₁: Competitive aggressiveness has no significant effect on SMEs performance in Gombe State

H₀₂: Autonomy has no significant effect on SMEs performance in Gombe State

H₀₃: Innovativeness has no significant effect on SMEs performance in Gombe State

H₀₄: Proactiveness has no significant effect on SMEs performance in Gombe State

H₀₅: Risk-taking has no significant effect on SMEs performance in Gombe State

2.0 Literature Review

2.1 Conceptual Review

Entrepreneurial Orientation (EO) has emerged as an important concept in the survival of SMEs (Hung & Chiange, 2010). EO was originally proposed by Miller (1993) as having three dimensions namely; innovativeness, proactiveness and risk-taking but Lumpkin and Dess (1996) added two more dimensions namely; competitive aggressiveness and autonomy. This five-dimensional approach apparently provides a comprehensive way of studying entrepreneurial orientation (Hughes & Morgan 2007). Miller (1993) described EO as the willingness of SMEs to innovate and rejuvenate its market potentials, to take risk by trying new ideas and to be more proactive than its competitor in seeking out new market opportunities for growth and survival. According to Lumpkin & Dess (1996), EO is defined as decision making styles, processes, practices, rules, and norms according to which SMEs make decisions to enhance its growth, survival and sustainability through innovativeness, proactiveness, and risk taking propensity.

Covin and Slevin, (2009) viewed EO as the willingness to innovate, take risks to try out new products, services and markets, and act more proactively than competitors when it comes to new opportunities in the marketplace. EO is a management strategy used by SMEs to engage in creativity, technological leadership, taking bold actions and acting in anticipation of surviving in the market (Idar & Mahmood, 2011). Therefore, SMEs are adequately guided to reposition for greater productivity and drive the process of survival. Lumpkin and Dess (2001) argued that, acquiring entrepreneurial orientation is one of the criteria for firms who want to be successful. Zahra and Covin (1995) opines that firms with EO have an undue advantage of proactiveness which gives them the ability to present new offers to the market ahead of competitors which gives them a competitive advantage.

2.2 Empirical Review

Most empirical studies on entrepreneurial orientation have utilized the instrument developed by Miller (1983) and extended by Covin and Slevin (1989). Birech, Karoney and Alang'o (2018) examined the relationship between EO and performance of SMEs in Kenya. Innovativeness, proactiveness and risk-taking were significant on firm performance. Wamburu, Robert and Kenneth (2016) investigated the influence of entrepreneurial orientation on firm performance of Kenya’s agro processing SMEs. The study revealed that proactiveness, risk-taking and innovativeness have positive and statistically significant influence on firm performance.
Prabin (2016) examined entrepreneurial orientation and business performance of handicraft industry. The result revealed that autonomy has significant effect on business performance while innovativeness, risk-taking, proactiveness and competitive aggressiveness were insignificant. Chenuos and Maru (2015) examined the effect of entrepreneurial orientation and firm performance in Kenya. The study showed that innovativeness and proactiveness have positive effect on firm performance. However, risk-taking negatively affects firm performance. Mason, Floreani, Miani, Bettrame and Cappelletto (2015) examined the impact of entrepreneurial orientation on SMEs performance. The result found innovativeness, risk-taking and autonomy to be significant while proactiveness and competitive aggressiveness were insignificant.

Venter (2014) analysed the influence of entrepreneurial orientation on business success of selected South African SMEs. The result indicated a significant relationship between innovativeness and proactiveness, while autonomy, risk-taking and competitive aggressiveness were insignificant. Duru, Ehidiamhen and Chijioke (2012) investigated the role of entrepreneurial orientation on the performance of SMEs in FCT Abuja, Nigeria. The study found innovativeness to have a significant effect on SMEs while autonomy, proactiveness and risk-taking were insignificant. Also, competitive aggressiveness was not demonstrated by SMEs in Abuja. Fairoz, Hirobumi and Tanaka (2010) examined the effect of entrepreneurial orientation and business performance of SMEs of Hanbantota district, Sri Lanka. The result revealed that risk-taking, innovativeness and proactiveness were significant on business performance.

Previous researches examining the effect of entrepreneurial orientation on firm performance provides mix findings. Most of the studies reviewed measured entrepreneurial orientation using three dimensions (innovativeness, risk-taking, proactiveness). Therefore, this study examined the effect of entrepreneurial orientation using five dimensions; competitive aggressiveness, autonomy, innovativeness, proactiveness and risk-taking.

2.3 Theoretical framework

The theory underpinning this study is the Resource-Based View (RBV). The origin of the resource-based view can be traced back to earlier research found in work of Penrose (1959). The resource based view theory conceptualise organisations from two perspectives which are resource diversity and immobility. Resource diversity stems when organisation possesses resources or capabilities that are ubiquitous and could not sustain competitive advantage in the market place. While resource immobility laid emphasis on that capabilities, resources, operational dexterity, skills and working strategies that are not common, which perhaps distinguished business operators from others.

The RBV theory holds that businesses are facilitated especially when entrepreneurs have unique capabilities, resources and operational skills that enable them acquire and deploy resources effectively. It laid emphasis on the need for an entrepreneur to possess the required capabilities and resources as a prerequisite condition necessary for achieving a sustained competitive advantage. The aforementioned addresses the need for Small and Medium Enterprises (SMEs) to be proactive given the changing business environment. In light of the above, SMEs that wish to survive in a changing business environment must possess an exceptional skill that would guarantee good understanding of the economic environment in attempt to achieve a sustained competitive advantage.

Figure 1 below presents the relationship between independent variables (entrepreneurial orientation; comprises five dimensions, competitive aggressiveness, autonomy, innovativeness, proactiveness and risk-taking) and dependent variable (SMEs performance) measured by business success through the owner/managers perception on turnover, profit and growth.

![Conceptual framework of entrepreneurial orientation on firm performance.](image)
3. **Methodology**

This study used cross-sectional survey research design. Primary data was collected through self-administered questionnaires to owners/managers of Small and Medium Enterprises (SMEs) in Gombe State. The population of the study consists of 579 registered SMEs in Gombe State (obtained from Gombe State ministry of trade and industry). Stratified and simple random sampling technique was utilized for the sample selection. Out of the total population, a sample of 236 SMEs was selected using Yamane’s (1968) formula as cited in Isreal(2013). 20 percent (47 questionnaires) were added to the sample size in order to take care of unreturned questionnaires which make the total questionnaires distributed to the respondents to be 283. This study adopted The Hughes and Morgan (2007) EO Scale to measure entrepreneurial orientation. Five point Likert scale ranging from 1 strongly disagree to 5 strongly agree was used. Also, Venter (2014) was adopted to measure firm performance (perceived business growth). The study utilized structural equation model to analyse the data and test the hypotheses.

4. **Results and Discussion**

**Response Rate**

Table 1: *Summary of Response Rate*

<table>
<thead>
<tr>
<th>Items</th>
<th>No of Copies</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copies of Questionnaire Distributed</td>
<td>283</td>
<td>100</td>
</tr>
<tr>
<td>Copies of Questionnaire Returned</td>
<td>248</td>
<td>87.6</td>
</tr>
</tbody>
</table>

Source: Field Survey, 2018

Table 1 shows the summary of the copies of questionnaire distributed and the number returned. A total number of 283 copies of the questionnaire were distributed to respondents and 248 copies were returned, constituting 87.6% response rate. These were found to be valid and useful for the analysis. It is not necessarily required that researchers must have 100 percent response rate of their sample size for the results to be valid and generalizable (Aminu, 2015). 50 percent response rate is considered adequate for data analysis and reporting, whereas 60 percent is good, and 70 percent is very good considerably (Babbie, 2007). The study response rate is considered as very good with response rate of 87.6 percent.

4.1 **Assessment of measurement model**

Data analysis via structural equation model was used to examine the reliability and validity of the instruments used to assess the effect of entrepreneurial orientation on the performance of small and medium enterprises (SMEs). Figure 2 presents the examined measurement of the model of the study.

Figure 2: *Measurement Model*

Figure 2 shows the loadings of all constructs and all constructs loaded well as they loaded above the benchmark of 0.7 recommended by Hair, Black, Babin and Anderson (2014).
Table 2: PLS Quality Criteria Overview

<table>
<thead>
<tr>
<th>Constructs</th>
<th>AVE</th>
<th>Composite Reliability</th>
<th>R Square</th>
<th>Cronbachs Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressiveness</td>
<td>0.6637</td>
<td>0.8554</td>
<td>0.7478</td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.5891</td>
<td>0.8104</td>
<td>0.7527</td>
<td></td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.6054</td>
<td>0.8214</td>
<td>0.7742</td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.6066</td>
<td>0.8219</td>
<td>0.7612</td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>0.6603</td>
<td>0.8536</td>
<td>0.7429</td>
<td></td>
</tr>
<tr>
<td>SMEs Performance</td>
<td>0.6666</td>
<td>0.8571</td>
<td>0.553072</td>
<td>0.8508</td>
</tr>
</tbody>
</table>

Table 2 presents the quality criteria of the model. Composite Reliability (CR) and Average Variance Extracted (AVE) also met the minimum benchmark as the constructs have coefficient greater than .7 for CR and AVE coefficient of above .5. Loadings of CR and AVE should not be below .7 and 0.5 respectively (Hair et al. 2014). These results prove the data show convergence.

Table 3: Latent Variable Correlations

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Agg</th>
<th>Auto</th>
<th>Inno</th>
<th>Pro</th>
<th>Risk</th>
<th>SMEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressiveness</td>
<td>0.8146</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td></td>
<td>0.6688</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.6228</td>
<td>0.5090</td>
<td>0.7781</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.5700</td>
<td>0.5752</td>
<td>0.5265</td>
<td></td>
<td>0.7788</td>
<td></td>
</tr>
<tr>
<td>Risk-taking</td>
<td>0.6129</td>
<td>0.5568</td>
<td>0.6590</td>
<td>0.4925</td>
<td>0.8126</td>
<td></td>
</tr>
<tr>
<td>SMEs Performance</td>
<td>0.6891</td>
<td>0.6094</td>
<td>0.5461</td>
<td>0.5051</td>
<td>0.6041</td>
<td>0.8164</td>
</tr>
</tbody>
</table>

Table 3 presents the result of discriminant validity. The numbers that are bold represent the square root of AVE of each latent variable examined in the study. The square roots of all the AVE are higher than their correlation with other latent variables. Going by the Fornell and Larcker (1981), it was established that, if this value is larger than other correlation values in the column and row, thus result indicates that discriminant validity is well established.

Table 4: Path Coefficient

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Beta Value</th>
<th>Standard Error</th>
<th>T Statistics</th>
<th>P Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggressiveness -&gt; SMEs Performance</td>
<td>0.372142</td>
<td>0.084852</td>
<td>4.385758</td>
<td>.018</td>
<td>Rejected</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.184378</td>
<td>0.063846</td>
<td>2.887852</td>
<td>.009</td>
<td>Rejected</td>
</tr>
<tr>
<td>Innovativeness</td>
<td>0.128581</td>
<td>0.059190</td>
<td>2.624260</td>
<td>.038</td>
<td>Rejected</td>
</tr>
<tr>
<td>Proactiveness</td>
<td>0.212103</td>
<td>0.075588</td>
<td>2.806049</td>
<td>.000</td>
<td>Rejected</td>
</tr>
</tbody>
</table>

Source: Field survey, 2019

The result in Table 4 shows that competitive aggressiveness has positive and significant effect on SMEs performance with P value of <.05% ($\beta=0.372$). As a result, the null hypothesis which stated risk-taking has no significant effect on SMEs performance in Gombe State is hereby rejected.

Likewise, autonomy has significant effect on SMEs performance with P value of .009<.01% ($\beta=0.184$). This implies that entrepreneur’s autonomy affects their performance. Therefore, H0 which stated autonomy has no significant effect on SMEs performance in Gombe State is also rejected.

Furthermore, innovativeness has significant effect on SMEs performance with P value <.01% ($\beta=0.128$). Hence, H0 which stated innovativeness has no significant effect on SMEs performance in Gombe State is hereby rejected.

The results also revealed that proactiveness has significant effect on SMEs performance of selected entrepreneur in Gombe State with P value .038<.01% ($\beta=0.155$). Thus, the null hypothesis which stated that proactiveness has no significant effect on SMEs performance in Gombe State is hereby rejected.

Finally, results revealed SMEs performance is strongly affected by ability of an entrepreneur’s risk taking. The result indicates P-value of .000 <.01 ($\beta=0.212$). Thus, the null hypothesis which stated that risk taking has no significant effect on SMEs performance in Gombe State is rejected.

Adjusted R square is .252%. This means that 25.2% variance of SMEs performance is accounted for by entrepreneurship orientation. Other variables not in this study account for the remaining 74.8%. The adjusted R square of 25.2% also indicates that if different set of data is use in the model it will give a similar result. This indicates a cross validation of the model. The DW of 1.543 also shows that there is absence of harmful multicollinearity as it is above the benchmark of 1.5 and below a threshold value of 2.5.
Cronbach’s Alpha was carried out to test for the reliability of the model, the result revealed values ranging from 0.743 to 0.956 which are all greater than 0.7 minimum benchmark value, hence the instrument is reliable for the study. A beta Coefficient of 59.797% means that, there is a strong relationship between independent variables and dependent variable.

These results are supported by most of the previous studies such as Prabin (2016), Wambugu, Robert and Kenneth (2016), Mason et al. (2015) that all found entrepreneurship orientation as a tool that will lead an entrepreneur to surpass other competitors in terms of sales growth and profitability.

5. Conclusion and Recommendations
This paper has investigated the effect of entrepreneurship orientation on the performance of SMEs in Gombe State and found all constructs of entrepreneurship orientation (risk-taking, innovativeness, pro-activeness, autonomy and competitive aggressiveness) to be significant to SMEs performance. This study therefore concluded that, the survival and growth of SMEs in Gombe State largely depends on entrepreneurs’ orientation. Consequently, the paper recommends that:

i. It is expected from entrepreneur in Gombe State to have the tendency to intensely and directly challenge competitors rather than trying to avoid them (Competitive aggressiveness). Aggressive moves can include efficiency of production, price-cutting and sales promotion, as well as relationship marketing.

ii. Entrepreneurs in Gombe State needs to act or function independently in terms of running their business activities as well as decision making without interference of third party.

iii. SMEs operators in Gombe State should be creative as creativity/innovativeness in business adds more value to products which will subsequently improve sales as well as business growth.

iv. Both existing and prospective entrepreneurs in Gombe State should be proactive in their business endeavour. That is, acting in advance to deal with unexpected change or difficulty and try to prevent future problems.

v. Entrepreneurs in Gombe State should have the capability to transform business risks into opportunities or wealth.

References


Gombe State Ministry of Trade and Industry.


Keywords: Oil Price, GDP, Inflation Rate, Terms of Trade, SVAR

1. Introduction

Nigeria has been operating a mono-economy over the years. Before the discovery of crude oil at commercial quantity in the country, the Nigerian economy depended solely on the agricultural sector for foreign exchange earnings. As the revenue emanating from crude oil increased in the 1970s, attention was shifted from the agricultural sector to the oil sector. Rather than developing the oil sector as a supplement to the agricultural sector, the country has sacrificed agriculture for oil. That singular act has, over the years, degenerated to the extent that the country has been importing the agricultural commodities that were previously its main sources of foreign exchange earnings.

The ironical part of the issue is the exogenous nature of oil to the Nigerian economy. This is based on the fact that both oil price and oil production are determined at the international market, which is mainly dominated by the developed countries. The instability experienced at the international oil market has notable consequences on both economic growth and price stability in Nigeria. Although IMF (2015) asserts that the recent sharp decline in the world oil prices would enhance developing countries to sustain low inflation, fortify growth prospects and improve both internal and external balances, Nigeria — being both oil exporter and importer — has been witnessing economic downturn in the recent years. Incidentally, while the global oil prices were decreasing, the domestic price of petrol increased from ₦86 per litre to ₦145 per litre in the course of removing subsidy.

The fluctuations in the price of crude oil over the years (getting to the peak of US $123.97 per barrel in the second quarter of 2008 but followed by a sharp decline to US $42.95 per barrel in the first quarter of 2009, another boom between 2010 and 2011, and consistent decline since mid-2014 till the first quarter of 2018) have raised serious concern about its macroeconomic implications across the world. This is more worrisome in Nigeria that is witnessing decline in both oil price and oil production level. The country is also experiencing massive importation of refined petroleum products as a result of the comatose of the domestic refineries. The country is importing approximately 92% of refined products for local consumption (Thisday Newspaper, 20/06/2017).

There is no gainsaying in the fact that Nigeria has generated enormous revenue from the exporting of crude oil over the years. However, this revenue has not significantly trickled down to improving the welfare of the populace as the economy has been concurrently susceptible to instability. The uncertainties associated with the oil price shocks have led to imprecise revenue projection which subsequently worsens budget implementation, economic planning and external balance. Meanwhile, there is no consensus in the literature regarding the influence of oil price shocks on macroeconomic variables in the developing countries. While some extant studies portray that oil price shocks exert significant positive effect on economic performance (Aliyu, 2009; Omisakin et al., 2009; Alley et al., 2014; Obi et al., 2016; Oyelami and Olomola, 2016), some found that oil price shocks have adverse effect (Sala-i-Martin and Subramanian, 2003; Ragunidin and Reyes, 2005; Jimenez-Rodriguez and Sanchez, 2010; and Ushie et al., 2013). Yet, some studies do not find
significant effect of oil price shocks on variables such as: money supply, price level, output and government expenditure (Chang and Wong, 2003; Olomola and Adejumo, 2006; Olusegun, 2008; Akpan, 2009; Akinleye and Ekpo, 2013) while some maintain that oil price shocks worsen output cycles in the oil-rich countries (Olomola, 2007; Omojolaibi and Egwaikhide, 2013).

Even though the influence of oil price shocks on economic growth in Nigeria has attracted attentions of several scholars (Sala-i-Martin and Subramanian, 2003; Ayadi, 2005; Olomola and Adejumo, 2006; Olomola, 2007; Aremo et al., 2012; Ushie et al., 2013; Alley et al., 2014 and Obi et al., 2016), these studies fail to incorporate other forms of shocks such as terms of trade shocks and foreign aids shocks. Also, the extant studies in Nigeria that address the response of economic growth to oil price shocks rarely take cognizance of the response of inflation rate to oil price shocks, with the exemption of the study by Olomola and Adejumo (2006). The study, however, uses VAR approach which merely treats all variables as endogenous whereas oil price has been observed to be exogenous to the developing economies. The fact that price instability tends to mitigate the transition of economic growth into economic development is one of the reasons that necessitate this study.

This paper is structured into five sections. Besides the introductory section, the literature review is presented in section 2. Section 3 focuses on the methodology utilized for the study. Section 4 covers data analyses and discussion of results while section 5 concludes the paper.

2. Review of Literature
Several studies have been carried out on the impact of oil price on economic activities globally, and some of these are considered below. Alley et al. (2014) employ the general methods of moment (GMM) to examine the impact of oil price shocks on the Nigerian economy. The study found that oil price shocks insignificantly retard economic growth while oil price itself significantly improves it. Similarly, Aremo et al. (2012) evaluate the effect of oil price shock on fiscal policy in Nigeria. Using structural VAR method, the results indicate that oil price has significant effect on government expenditure and government revenue in Nigeria. Also, the study shows that oil price shock influences government revenue and GDP first before reflecting on fiscal expenditure.

Ayadi et al. (2000) examine the effects of oil production shocks on economic growth in Nigeria. Using VAR approach, the study found that output responds positively to positive oil production shocks while inflation responds negatively after a positive oil production shocks to the extent that an oil price increase leads to an oil production increase. Similarly, Aliyu (2009) examines the effects of oil price shock and real exchange rate volatility on real economic growth in Nigeria. Using a non-linear approach, the results show that asymmetric oil price increases in the non-linear models have larger positive impacts on real GDP growth than in other specifications. Also, the study found that oil price shock and appreciation in the level of exchange rate exert positive impact on real economic growth in the country.

In the same vein, Omisakin et al. (2009) examine the short-run implications of oil price shocks on the Nigerian economy using VEC model. The study found that a 10% increase in oil price leads to about 79% increase in oil revenue, 45% increase in government expenditure, 17% increase in money supply, 11% decrease in inflation (CPI) and 31% increase in GDP in the short run. These results, thus, imply that the Nigerian economy is vulnerable to international oil price volatility. Similarly, Obi et al. (2016) explore the effects of oil price shock on macroeconomic performance in Nigeria. Utilizing VAR approach, the results indicate that a proportionate change in oil price leads to a greater proportionate change in real exchange rate, interest rate and GDP in the country. Also, Oyelami and Olomola (2016) investigate the macroeconomic responses of Nigerian economy to external shocks. Using global vector auto-regression (GVAR), the results portray that oil price shock has positive effect on real GDP as well as exchange rate in the country whereas inflation and interest rate do not portray instantaneous response to the shocks.

The study by IMF (2000) on the influence of oil price increase on the global economy shows that the differential effect of an oil price surge is larger for the advanced countries than for the developing countries altogether. The study shows that differences in terms of the relative size of oil importing to exporting countries account for the greater proportion of the discrepancy. Oil price shock is unambiguously portrayed to reduce aggregate demand by redistributing income between net oil importers and exporters. Also, the results portray that oil price has positive effect on economic growth in the oil-producing countries while it has mixed effects on economic growth for some Asian countries. Focusing on the inflationary influence of oil price shocks, Hooker (2002) assesses the contribution of oil price on the United States’ inflation in a Phillips curve model. The results on structural break indicate that oil price fluctuations had substantial influence on inflation before 1980 but the influence faded after that era.

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Cologni and Manera (2008) examine the impact of oil price on inflation and interest rate by utilising vector error correction model (VECM) framework for G7 countries, and found that oil price has significant effect on inflation in 4 out of the 6 countries, and this is transmitted to the real sector by raising the rate of interest.

Contrary to previous research outcomes, the study by Cunado and Perez-de-Gracia (2003) on 15 European countries reveals mixed results as co-integrating long-run relationship between oil prices and economic activity is found only in two countries (the United Kingdom and Ireland). Hence, the study suggests that the impact of oil shocks on economic activities is limited to the short-run. Chang and Wong (2003) examine the impact of oil price fluctuation on the Singapore economy, using co-integrated VECM technique. The results suggest that oil price shock only has a marginal effect on Singapore's macroeconomic performance. Sala-i-Martin and Subramanian (2003) maintain that natural resources, noticeably oil and minerals, exert an adverse as well as non-linear influence on growth through their harmful influence on the quality institutions. The results reveal that waste coupled with corruption from oil is responsible for the country's abysmal economic performance somewhat than the acclaimed 'Dutch disease'.

Also, Ragunidin and Reyes (2005) examine the effect of oil price shocks on real GDP of the Philippine economy. Using an asymmetric VAR model analysis, the results indicate that oil price shock brings about sustained decline in the real GDP of the economy, while asymmetric VAR model analysis suggests that oil price decrease is responsible for a substantial impact in each variable's changes than oil price increase. Likewise, Olomola and Adejumo (2006) examine the effect of oil price shocks on output, inflation, real exchange rate and money supply in Nigeria. The study utilizes VAR method of analysis and the results reveal that oil price shocks do not affect output and inflation in Nigeria. Also, Olomola (2007) investigates the effect of oil rents on economic growth in several countries including Africa, combining both oil-exporting and non-oil exporting countries. The study adopts panel regression technique and the findings reveal evidence of resource curse in oil-exporting countries.

Similarly, Akinleye and Ekpo (2013) explore the macroeconomic implications of oil price shock as well as oil revenue shock in Nigeria, adopting VAR approach. The study found that oil price shock does not have substantial effect on the real government expenditure in the short-run, though the reverse is the case in the long run. Also, Ayadi (2005) examines the relationship between oil price changes and economic development via industrial production in Nigeria. Using VAR model on some macroeconomic variables, the results indicate that oil price changes affect real exchange rates which, in turn, affect industrial production. The study, however, points out that the indirect effect of oil prices on industrial production is not statistically significant. Akpan (2009) explore the effect of oil price shocks on economic activities in Nigeria. Using VAR model analysis, the results reveal a positively significant asymmetric effect of oil price shocks on real government expenditure, while such effect on industrial output growth is found to be marginal with observed significant appreciation of the real exchange rate. These findings buttress the results obtained by Ayadi (2005), Olomola and Adejumo (2006) on Nigeria.

Jimenez-Rodriguez and Sanchez (2005), using multivariate VAR analysis in a study involving major industrialized OECD countries, found that the response of real GDP to oil price shocks differ between net oil importers and exporters. Also, their asymmetric (non-linear) result reveals that oil price decrease is significant only in few countries, while shock to oil price is one of the greatest sources of instability in real output. Similarly, Jimenez-Rodriguez and Sanchez (2010) look into the influence of oil price shocks on macroeconomic variables in Japan. Employing VAR model, the results show that oil price shocks result in declined industrial production but higher inflation. Also, Ushie et al. (2013) examine the sensitivity of major macroeconomic variables to oil revenue shocks in Nigeria by using VAR approach. The results conform to the universal view that fluctuations in oil revenues lead to hike in inflation, decrease output growth and real exchange rate appreciation in Nigeria.

Furthermore, the study by Chuku et al. (2011) focuses on the linear and asymmetric impacts of oil price shocks on the Nigerian economy. Using VAR model with Granger causality test approach, the study found that oil price shocks are not a major determinant of macroeconomic activity in Nigeria in the linear model. The Granger causality results show that world oil prices do not influence macroeconomic activity while the non-linear specification results indicate that the impact of world oil price shocks on the Nigerian economy is asymmetric.

However, Genberg (2003) estimates the relative importance of domestic and foreign shocks as sources of macroeconomic fluctuations in Hong Kong since the adoption of the currency board. Using a semi-structural VAR approach, the study found that external factors are dominant in the medium to long-run. Also, Genberg (2005) investigates the transmission mechanisms between external shocks and deflation by using vector autoregressive model for seven small economies in Asia. The results show that external shocks from the
United States have significant effect on inflation and GDP in the small economies while shocks emanating from China do not have significant effect. Ezema and Amakom (2011) examine the relationship between the terms of trade shocks and macroeconomic performance in Nigeria. Applying the McCarthy et al. (1994) framework which is based on the famous theory of distortions and welfare, the study found that negative terms of trade shocks are prominent in the Nigerian economy and that the shocks usually reflect the pattern of global oil booms and bursts.

Dorsainvil (2011) explores the relative importance of external shocks on economic performance in the Haitian economy. Adopting a VAR model, the study reveals that foreign aid has a small influence on reinforcing economic performance while shocks emanating from other variables (USGDP, USIR, Disaster ratio) have substantial influence on the GDP of the country. Staehr and Vermeulen (2016) consider the short-term effects of competitiveness shocks on macroeconomic performance in the euro area. Using VAR model, the results show that competitiveness shocks account for a substantial proportion of GDP developments in most countries.

The study by Ezema (2012) compares the impacts of the application of policy adjustments to terms of trade shocks among selected African countries. The results portray that adverse terms of trade shocks are not only high in Africa but that policy indicators refuse to adjust appropriately in the face of sharp decline in export prices as clearly seen in the 1980 to 1984 period for Gabon and Nigeria. In the same vein, Omololaila and Egaikihide (2013) examine the impact of oil price dynamics on the economic performance of five oil-exporting countries in Africa (Algeria, Angola, Egypt, Libya and Nigeria). The study uses panel VAR technique and the results show that gross investment responds more to oil price volatility than fiscal deficit, real GDP and money supply. Hassan et al. (2017) investigate the effect of macroeconomic linkages on international shock transmissions in selected East Asian countries. Using Global VAR model, the results show that the focused countries are more linked to global economy through equity markets, real output and exchange rates. Finally, Adeleke et al. (2019) investigates the influence of crude oil price shocks on the international shock transmissions in selected East Asian countries. Using Global VAR model, the results show that competitiveness shocks account for a substantial proportion of GDP developments in most countries.

3. Methodology
3.1 Theoretical Framework

The theoretical framework adapted for this study takes after the study by Genberg (2005) which is in the form of combination of Phillips curve and Aggregate Demand equation – for inflation and output respectively – taking cognizance of external demand as well as international competitiveness. This framework is utilized to demonstrate the links between oil price shocks and selected macroeconomic variables in Nigeria. To start with, consider two countries (Nigeria and South Africa, represented by superscripts N and S respectively) which happen to be competitors in the market of a third country (for instance, the United States represented by subscript G). It is assumed that the two countries (Nigeria and South Africa) import goods from the third country (the United States) and also from each other. Then, Nigeria is depicted by a price adjustment equation (inflation), a wage equation, a relationship reflecting Okun’s law, and an aggregate demand equation. These are respectively portrayed in Equation (1) to Equation (4). Hence, Equation (1) is such that inflation in Nigeria is a function of past inflation as well as expected future inflation in Nigeria, changes in the costs of input (wage increases), changes in imported goods from South Africa and the rest of the world. Equation (2) is such that links wage increases to expected inflation and unemployment while Equation (3) links unemployment to the quantity of demand for goods. Also, Equation (4) implies that the demand for Nigeria’s goods is a function of the demand in the rest of the world, two competitive terms (that is, relative price of Nigeria’s goods to the goods of the rest of the world and relative price of goods of Nigeria and South Africa in the world market), real interest rate in Nigeria and expected future demand for Nigeria’s goods.

\[ INF^N_t = \alpha_1^N INF^N_{t-1} + \alpha_2^N EINF^N_{t+1} + \alpha_3^N W^N_t + \alpha_4^N (INF^S_t + EXR^N/S^S_t) + \alpha_5^N (INF^G_t + EXR^N/G^S_t) + \epsilon^N_{t,FL} \]

\[ W^N_t = \beta_1^N W^N_{t-1} + \beta_2^N EINF^N_{t+1} - \beta_3^N U^N_t + \epsilon^W_{t,FL} \]

\[ U^N_t = -\delta_4^N GDP^N_t + \epsilon^U_{t,FL} \]  

\[ GDP^N_t = \delta_5^N GDP^G_t - \delta_6^N (INF^A_t - EXR^N/G^S_t) - \delta_7^N (INF^S_t - EXR^N/S^S_t) - \delta_8^N (INF^G_t - EXR^N/G^S_t) + \epsilon^D_{t,FL} \]  

Where: \( INF^N_t \) = Inflation in Nigeria at time t, \( INF^N_{t-1} \) = Past inflation in Nigeria,
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\( EINF^N_t = \) Expected future inflation in Nigeria,
\( W^N_t = \) Wage increases in Nigeria which represent changes in input costs,
\( (INFC_t + EXRN^{NS}_t) = \) Changes in imported goods from South Africa,
\( (INFG_t + EXRG^{IG}_t) = \) Changes in imported goods from the rest of the world (eg, U.S.),
\( EXRN^{NS}_t = \) Rate of change in the nominal exchange rate between Nigeria and South Africa,
\( EXRG^{IG}_t = \) Rate of change in the nominal exchange rate between Nigeria and the rest of the world,
\( U^N_t = \) Unemployment in Nigeria at time \( t \),
\( GDP^N_t = \) Demand for Nigeria’s goods at time \( t \),
\( GDP^S_t = \) Demand in the rest of the world at time \( t \),
\( EGDPN_{11} = \) Expected future demand for Nigeria’s goods,
\( (INFA_t - EXRN^{IG}_t - INFG_t) = \) Relative price of Nigeria’s goods to the goods of the rest of the world,
\( (INFS_t - EXRN^{NS}_t - INFS_t) = \) Relative price of goods of Nigeria and South Africa in the world market,
\( (INT^N_t - EINF^N_{11}) = \) Real interest rate in Nigeria at time \( t \).
\( \alpha_1, \beta_i, \theta_1, \delta_i = \) Parameters of the equations, and
\( \varepsilon_t = \) Stochastic term.

Since this study is centered on the impacts of oil price shocks on macroeconomic variables, following study by Genberg (2005), this study is restricted to the static form by eliminating all terms of dynamics and expectations terms. Hence, Equations (1) to (4) respectively become:

\[
\begin{align*}
INFC_t &= a^N_1W^N_t + a^N_2(INFC_t + EXRN^{NS}_t) + a^N_3(INFG_t + EXRG^{IG}_t) + \varepsilon_t^{NPLN} \\
W^N_t &= -\beta^N_1U^N_t + \varepsilon_t^{W^N} \\
U^N_t &= -\theta^N_1GDP^N_t + \varepsilon_t^{U^N} \\
GDP^N_t &= \delta^N_1GDP^S_t - \delta^N_2(INFA_t - EXRN^{IG}_t - INFG_t) - \delta^N_3(INFS_t - EXRN^{NS}_t - INFS_t) + \varepsilon_t^{GDP^N} \\
\end{align*}
\]

Then, substituting Equation (7) into Equation (6) and subsequently substituting the resultant equation into Equation (5) yields Equation (9) – which is the static Phillips curve equation. Similarly, expanding Equation (8) and rearranging yields Equation (10) – which is the static Aggregate Demand equation.

\[
\begin{align*}
INFC_t &= a^P_1\beta^P_1\theta^P_1GDP^P_t + a^P_2INFC_t + a^P_3EXRN^{NS}_t + a^P_4INFS_t + a^P_5EXRG^{IG}_t + \varepsilon_t^{P,N} \\
GDP^P_t &= \delta^P_1GDP^S_t - (\delta^N_1 + \delta^P_1)INFC_t + \delta^P_2INFS_t + \delta^P_3EXRN^{NS}_t + \delta^P_4EXRG^{IG}_t + \delta^P_5INFS_t + \varepsilon_t^{GDP^P,N} \\
\end{align*}
\]

Thus, the slope of the reduced-form Phillips curve in Equation (9) is a function of the flexibility of wage and price adjustments in the economy denoted by the parameters \( \alpha_3, \beta_3, \) and \( \theta_2 \). The nature of the Nigerian open economy portrays interdependence attributable to trade in imported goods. The slope of the Aggregate Demand equation, that is Equation (10), demonstrates competitiveness effects with its location depending on external demand, inflation in South Africa and the rest of the world, along with exchange rate policy.

This theoretical framework developed by Genberg (2003, 2005) illustrates how shocks from influential world economies (for instance, the United States, the United Kingdom, Germany, France and recently, China) may affect economic activities in the less developed countries of the world. Thus, inflationary or deflationary shocks, as the case may be, outside a country and region influence the country or region both directly (via their bilateral trade links with the influential countries) and indirectly as the countries within the region trade with one another incorporating the original inflationary or deflationary shocks.

### 3.2 Model Specification

Based on the discussed framework, the implicit functional model for this study is stated thus:

\[
MEVi = f(OIP) \tag{11}
\]

Where \( MEVi \) represents selected macroeconomic variables utilized as measures of economic growth and price stability, and it is a vector of gross domestic product (GDP) and inflation rate (INF); \( OIP \) represents oil price. By incorporating other forms of shocks (foreign aids (FAID) and terms of trade (TOT)) as well as exchange rate into the model as control variables, Equation (11) is restated as follows:

\[
MEVi = f(OIP, FAID, TOT, EXR) \tag{12}
\]

It should be noted that each of the two (2) selected macroeconomic variables (GDP and INF) is incorporated into the estimated models, one after the other, along with all the control variables. Also, the logarithmic
form of the following variables is used: gross domestic product (GDP), oil price (OIP), foreign aids (FAID), and exchange rate (EXR). However, the variables that already appear in their rate form are used directly and these are: inflation rate (INF) and terms of trade (TOT). This is in line with a study by Iyoboyi and Pedro (2014) which transforms RGDP, government expenditure and money into the logarithmic form while the nominal form of the variables in their rate form is incorporated into the estimated model.

3.3 Estimation Technique

A lot of studies (Aremo et al., 2012; Adigozalov and Rahimov, 2015; Alley and Poloamina, 2015) have adopted the Structural Vector Autoregressive (SVAR) approach as a tool of investigating shocks transmission among variables and provide information on impulse response functions (IRFs) along with forecast error variance decomposition (FEVD). These studies affirm that the structural VAR technique is an extension of the traditional (unstructured) VAR analysis that attempts to identify a set of independent disturbances using restrictions provided by economic theory rather than the a-theoretic restriction used in traditional VAR (McCoy, 1997). The major strength of this technique over other modeling techniques lies in its ability to capture feedback, shock transmission on variables and dynamic relationships among macroeconomic variables in an economy (Udoh, 2009).

This study concentrates on how oil price shocks may transmit through exchange rate to selected macroeconomic variables (GDP and INF) in Nigeria. Accordingly, the study considers five (5) endogenous economic time series at \( p \) lags. The endogenous linear equations are explicitly specified thus:

\[
Y_t = \alpha + A_1 Y_{t-1} + A_2 Y_{t-2} + \ldots + A_p Y_{t-p} + \epsilon_t
\]

Where: 
\( Y_t = [\text{OIP}, \text{FAID}, \text{TOT}, \text{EXR}, \text{MEV}]' \)

This is arrived at from Equation (12), and \( Y_t \) is an \( n \times 1 \) dimensional vector of endogenous variables. The ordering of variables is based on study by Ushie et al. (2013). Usually, the variables are ordered such that the least endogenous variables are considered first while the most endogenous variables are considered last. Based on studies by Hoover (2005), ordering and restriction are based on economic correlation and causality test – the results are not reported.

This study presents a contemporaneous residual relationship between the variables as follows:

\[
OIP_t = \sum_{k=0}^{n} h_{11}(k)\epsilon_{1t-k} + \sum_{k=0}^{n} h_{21}(k)\epsilon_{2t-k} + \ldots + \sum_{k=0}^{n} h_{51}(k)\epsilon_{5t-k}
\]

\[
FAID_t = \sum_{k=0}^{n} h_{12}(k)\epsilon_{1t-k} + \sum_{k=0}^{n} h_{22}(k)\epsilon_{2t-k} + \ldots + \sum_{k=0}^{n} h_{52}(k)\epsilon_{5t-k}
\]

\[
TOT_t = \sum_{k=0}^{n} h_{13}(k)\epsilon_{1t-k} + \sum_{k=0}^{n} h_{23}(k)\epsilon_{2t-k} + \ldots + \sum_{k=0}^{n} h_{53}(k)\epsilon_{5t-k}
\]

\[
EXR_t = \sum_{k=0}^{n} h_{14}(k)\epsilon_{1t-k} + \sum_{k=0}^{n} h_{24}(k)\epsilon_{2t-k} + \ldots + \sum_{k=0}^{n} h_{54}(k)\epsilon_{5t-k}
\]

\[
MEV_t = \sum_{k=0}^{n} h_{15}(k)\epsilon_{1t-k} + \sum_{k=0}^{n} h_{25}(k)\epsilon_{2t-k} + \ldots + \sum_{k=0}^{n} h_{55}(k)\epsilon_{5t-k}
\]

The structural equations in Equations (14) to (18) are presented in a vector as follows:

\[
\begin{bmatrix}
OIP \\
FAID \\
TOT \\
EXR \\
MEV_t
\end{bmatrix} = \begin{bmatrix}
h_{11}(k) & h_{21}(k) & h_{31}(k) & h_{41}(k) & h_{51}(k) \\
h_{12}(k) & h_{22}(k) & h_{32}(k) & h_{42}(k) & h_{52}(k) \\
h_{13}(k) & h_{23}(k) & h_{33}(k) & h_{43}(k) & h_{53}(k) \\
h_{14}(k) & h_{24}(k) & h_{34}(k) & h_{44}(k) & h_{54}(k) \\
h_{15}(k) & h_{25}(k) & h_{35}(k) & h_{45}(k) & h_{55}(k)
\end{bmatrix} \begin{bmatrix}
\epsilon_{1t} \\
\epsilon_{2t} \\
\epsilon_{3t} \\
\epsilon_{4t} \\
\epsilon_{5t}
\end{bmatrix}
\]

The \( \epsilon_{it} \) are uncorrelated white noise disturbances and their coefficients are expressed as \( h_{ij}(k) \). Subsequently, Equation (19) can be expressed in compact form as follows:

\[
Y_t = h(k)\epsilon_t
\]
For instance, $h_{i2}$ represents the impulse response of foreign aids ($FAID$) shock on macroeconomic variable ($MEV_i$) if freely estimated in the SVAR model. Similarly, $h_{i3}$ represents the impulse response of terms of trade ($TOT$) shock on macroeconomic variable ($MEV_i$) if freely estimated in the SVAR model.

Where: $Y_t = f(OIP, FAID, TOT, EXR, MEV_i)$

$$\varepsilon_t = [\varepsilon_{1t}, \varepsilon_{2t}, \varepsilon_{3t}, \varepsilon_{4t}, \varepsilon_{5t}]$$

And shocks $\varepsilon_i$ are normalized such that:

$$Var(\varepsilon_{1t}) = Var(\varepsilon_{2t}) = Var(\varepsilon_{3t}) = Var(\varepsilon_{4t}) = Var(\varepsilon_{5t})$$

### 3.4 Description and Measurement of Variables

#### 3.4.1 Gross Domestic Product (GDP): The real GDP is used as a measure of economic growth and it refers to the nominal GDP deflated by composite consumer price index. Thus, the real GDP is an inflation-adjusted measure that reflects the value of all commodities produced in a country at a given year, and it is expressed in base-year prices (Leykun and Sharma, 2017).

#### 3.4.2 Inflation Rate (INF): This is the periodic percentage increase in the cost of living as measured by the value of the consumer price index (CPI). The rate of inflation is one of the indicators considered by the authorities to set monetary policy. Increase in the price level decreases the purchasing power of a currency.

#### 3.4.3 Oil Price (OIP): The oil price is often said to be one of the least endogenous as it is subject to the impulses of external oil market cum exogenous economic conditions. Even the determination of the volume of the domestic oil production lies substantially with the OPEC allocated quotas, technological improvement as well as the uncertainties in the oil sector investments.

#### 3.4.4 Foreign Aid (FAID): This refers to economic or military assistance offered by one nation to another, or transfer of commodities (both final and intermediate) from one country to another to improve the standard of living in the recipient country. However, some aids may be given for political reason such as preserving peace. Foreign aid used includes the flows of official development assistance (ODA) as well as the official aid in constant 2000 U. S. dollars.

#### 3.4.5 Terms of Trade (TOT): This is the ratio of the price of exports to the price of imports. The expansion in productivity enhances market attractiveness which leads to improvement in trade, and this has the tendency to boost the welfare of the populace.

#### 3.4.6 Exchange Rate (EXR): Exchange rate is the value of a currency relative to another currency.

### 3.5 Scope and Sources of Data

The study covers the period between 1986 and 2016. This spans the period in which Nigeria adopts series of economic policies in its attempts to stabilize the economy. This study makes use of the secondary source of data for all the variables involved. The data on oil price are extracted from the Organisation of Petroleum Exporting Countries (OPEC) Statistical bulletin while data on the remaining variables are sourced from the World Development Indicators (WDI) database.

### 4. Analyses and Discussion of Results

#### 4.1 Optimal Lag Length Selection

The theoretical exposition of VAR approach rests on the inherent assumption that the lag order is known (Hamilton, 1994). However, empirical evidence has shown that the optimal lag order is usually unknown, and hence, its determination is essential. Thus, Table 1 captures the results of lag selection for variables in the estimated SVAR models of this study. The results of the optimal lag length selection tests suggest two diverse optimal lag lengths. While Likelihood Ratio test statistic (LR), Final prediction error (FPE) and Akaike information criterion (AIC) suggest a lag length of six in both Panel A and Panel B models, Schwarz information criterion (SC) and Hannan-Quinn information criterion (HQ) suggest a lag length of two in both models.

As a result of the conflict in the choice of the optimal lag length chosen by the five criteria, stability test is carried out on the two selected optimal lag lengths through Autoregressive (AR) Roots table and graph. The results of the AR Roots graph for lag six and lag two are carried out for each of the estimated SVAR models – though just the result of the AR Roots graph for lag two of only GDP estimated SVAR model is reported in Figure 1, as the result of the inflation model is not considerably different. The stability of the estimated SVAR model is ensured only if all the roots/dots have modulus less than one and lie inside the unit circle, otherwise, no stability. The stability test is essential in that if the SVAR model is not stable, some of the results or inferences from the results (such as impulse response standard errors) would no longer be reliable (Eviews 5 User’s Guide, 2004).

Based on the results from the Autoregressive (AR) Roots tables and graphs, the suggested lag length of six by LR, FPE and AIC is discarded while the lag length of two suggested by SC and HQ is adopted as the
optimal lag length in this study since all their roots have modulus less than one and their dots fall within the unit circle. The results of the AR root stability test satisfy the stability condition of the estimated SVAR models. Also, the VAR residual serial correlation LM tests reported in Table 3 show that the estimated SVAR models are devoid of serial correlation ($LM = 18.70, P > 0.05$; $LM = 21.86, P > 0.05$).

4.2 Lag Exclusion Wald Tests

In an attempt to test the validity, or otherwise, of the lag length selection results discussed in the previous section, this study carries out lag exclusion Wald test for each of the estimated SVAR models to ascertain the suitability of two lags for each of the models. The results of the Chi-squared test ($\chi^2$) statistic reported in Table 2 for the joint significance of all the endogenous variables in each of the estimated SVAR models with two lag lengths are jointly significant at 5% level. This buttresses the earlier assertion that the selected lag length of two is optimal.

4.3 Impulse Response of Structural VAR Result

It has been established in the literature that there is no evidence of bias in the estimated impulse response functions when short-run restriction is used and that SVAR performs remarkably well with short-run restriction (Christiano et al., 2006). Similarly, Lutkepohl et al. (2017) suggest that the utilization of short-run identifying restrictions is preferable, but the impulse responses of SVAR based on long-run identifying restrictions may not be very accurate. Hence, this present study adopts the short-run restriction in both estimated SVAR models. Blanchard and Perotti (1999) point out that the solid line depicts the point estimates while the broken lines depict one-standard deviation bands computed by Monte Carlo simulations based on normality assumption. Thus, the ‘dashed lines’ denote the intervals of two standard deviations whereas the ‘solid lines’ signify the impulse function.

The focus of this study is to determine the effect of oil price shock on economic growth and inflation in Nigeria. This is captured in Figure 2 and Figure 3 along with Table 4. The impulse response results in Figure 2 indicate how GDP responds to oil price, foreign aids, terms of trade, and exchange rate. The result shows that GDP responds positively to shock in oil price throughout the time horizons. Specifically, one standard deviation shock in oil price influences GDP to increase slightly from 0.0013% in the 1st period to 0.015% in the 16th period. This result conforms to the findings of Cologni and Manera (2008), Omisakin et al. (2009), Alley et al. (2014), and Obi et al. (2016) that oil price shock has significant effect on economic growth and that of the studies by Chang and Wong (2003), Cunado and Perez-de-Gracia (2003), and Akpan (2009) which found that oil price has marginal effect on macroeconomic performance.

The effect of foreign aid shock on GDP is negative in the short term. This negative effect vanishes after the first five periods as the effect turns positive as from the 6th period all through the longer time horizons. Specifically, one standard deviation shock in foreign aid triggers -0.0006% response in GDP in the 1st period and this slightly increases all through the longer time horizons with 0.0007%, 0.005% and 0.01% in the 6th, 10th and 16th periods respectively. A result of this nature may not be surprising in Nigeria given the high rate of misallocation of resources as a result of the poor state of the institutional arrangement. Thus, the result seems to buttress the claims of Doraisinivil (2011) that foreign aid has a small influence on reinforcing economic performance as well as Whitford and Pozzi (2014) that foreign aid only improves economic performance in countries with good institutions.

The result reveals that GDP responds negatively to shock in terms of trade throughout the time horizons. This suggests a call for frantic efforts to be made at revamping the productive capacity of the economy. This is in line with the studies by Ezema and Amakom (2011), Ezema (2012) that negative terms of trade shocks are prominent in the Nigerian economy; and Doraisinivil (2011), Alvarez and De-Gregorio (2014) which found that high terms of trade significantly affect economic performance. The result further shows that GDP responds positively to exchange rate shock in the first two periods but negatively in the subsequent periods. This implies that devaluation or depreciation of the Nigerian naira has worsened the state of the economy. This result conforms to the findings of Aliyu (2009) that exchange rate appreciation has positive impact on the real economic growth in the country.

Similarly, the impulse response results in Figure 3 indicate the responses of inflation rate to oil price, foreign aids, terms of trade, and exchange rate. The result shows that inflation rate responds positively to shock in oil price in all the time horizons. Explicitly, one standard deviation shock in oil price influences inflation rate to increase considerably from 0.033% in the 1st period to 0.23% in the 3rd period, 0.88% in the 10th period, and 1.18% in the 16th period. This result conforms to the findings of the studies by Jimenez-Rodriguez and Sanchez (2010), Targ et al. (2010), Ushie et al. (2013) which found that oil price has positive effect on inflation rate. This result, however, seems to be at variant with the findings of the studies by Olomola and Adejumo (2006) that oil price shocks do not affect inflation in Nigeria; IMF (2015) that the recent decline in
the oil price would give room for the small nations to maintain low inflation; Oyelami and Olomola (2016) that oil price shocks do not have instantaneous influence on inflation.

The effect of foreign aid shock on inflation rate is positive in the short-run. This positive effect vanishes after the first three periods as the effect turns negative as from the 4th period all through the longer time horizons. This result seems to be unexpected in Nigeria given the fact that the larger proportion of the aids received do not go into the real sector of the economy. Foreign aids are observed to be mostly abused by the successive governments in the country, and this invariably worsens inflation. The result further reveals that inflation rate responds negatively to shock in terms of trade throughout the time horizons. Precisely, one standard deviation shock in terms of trade causes inflation rate to decrease slightly from -0.02% in the 1st period to -0.63% in the 16th period. Moreover, the effect of exchange rate shock on inflation rate is positive in the short-run. The positive effect disappears after the first five periods as the effect turns negative as from the 6th period all through the longer time horizons.

4.4 Variance Decomposition of Structural VAR Results

The Forecast Error Variance Decomposition (FEVD) usually depicts the percentage of forecast error in a variable that is attributable to its shock as well as shocks in other variables in the model. The recursive cause order utilized in the computation of impulse response is maintained in this case. However, while the impulse response functions trace the effects of a shock in one endogenous variable to the other variables in the SVAR model, the FEVD separates the variation in an endogenous variable into the component shocks in the SVAR model. Hence, the FEVD provides information about the relative importance of each random innovation that affects the variables in the SVAR model (Pfaff and Taunus, 2008). Table 4 portrays the report of forecast error variance of each variable accounted for by the innovations to the structural equation. The study adopts forecast horizons of 1, 2, 3, 4, 9, 10, 15 and 16 ahead to analyze the forecast error variance for each variable that is ascribable to its shock as well as to shocks in the other variables in the model. It is worthy of note that variable’s own shock contributes more than any other shock to its forecast error variance and the result in Table 4 conforms to this postulate.

The results presented in Table 4 portray the report of forecast error variance of each variable accounted for by the innovations to the structural equations. The panel A of the results reveals that GDP's own shock is responsible for approximately 93.6% of its forecast error variance in the 1st period and this slightly increases to its peak of 95.8% in the 3rd period before its influence gradually decreases in the longer horizons as it accounts for about 88.5% and 82.1% in the 10th and the 16th periods respectively. This similar pattern is replicated in panel B of the results for inflation rate (INF) as INF's own shock is responsible for approximately 95.6% of its forecast error variance in the 1st period and its influence noticeably decreases in the longer horizons as it accounts for about 67.6% and 56.2% in the 10th and the 16th periods respectively.

The panel A further shows that exchange rate (EXR) is temporarily dominant in the forecast error variance of GDP in the first three periods while oil price (OIP) becomes dominant as from the 4th period all through the remaining time horizons. Oil price accounts for barely 0.70% in the 1st period, but its contribution increases considerably in the longer horizons as it accounts for about 7.38% and 9.79% in the 10th and the 16th periods respectively. Thus, oil price is dominant in the forecast error variance of GDP in most of the periods. Exchange rate accounts for about 5.44% in the 1st period but its contribution decreases gradually as from the second period until it gets to its trough of 0.91% in the 6th period before it begins to increase steadily in the longer horizons as it accounts for about 1.67% and 3.18% in the 10th and the 16th periods respectively.

Furthermore, foreign aid (FAID) accounts for less than 1% in the first twelve periods even though its contribution is above unity in the subsequent period all through the longer time horizons. Specifically, foreign aid accounts for barely 0.15% of the forecast error variance in GDP in the 1st period but its influence decreases slightly as from the second period until it gets to its trough of 0.05% in the 6th period before it begins to increase slightly in the longer horizons as it accounts for about 0.08%, 0.47% and 2.38% in the 7th, 10th and 16th periods respectively. Similarly, terms of trade (TOT) accounts for barely 0.12% of the forecast error variance in GDP in the 1st period even though its contribution increases slightly all through the time horizons as it accounts for about 1.11%, 1.92% and 2.53% in the 6th, 10th and 16th periods respectively. Thus, oil price, which is exogenous to the Nigerian economy, accounts for significant percentage of GDP forecast error variance in almost all the periods. A result of this kind conforms to the submissions of Genberg (2003), Iyoboyi and Pedro (2014) that the effects of external factors are dominant on macroeconomic performance.
Similarly, the panel B of the results in Table 4 shows that foreign aid is temporarily dominant in the forecast error variance of inflation rate (INF) in the 1st period while oil price becomes dominant as from the 2nd period all through the remaining time horizons. Oil price accounts for barely 0.66% in the 1st period, but its contribution increases considerably as from the 2nd period all through the longer horizons as it accounts for about 2.52%, 20.51% and 28.45% in the 2nd, 10th and 16th periods respectively. This result appears to be consistent with the realities in the economic environment of Nigeria. The result is, however, contrary to the submission of Olomola and Adejumo (2006) that oil price shocks do not affect inflation in Nigeria. Although terms of trade accounts for negligible proportion of the forecast error variance of inflation rate in the first two periods, its contribution increases considerably in the subsequent horizons. It becomes the second most dominant, after oil price, as from the 3rd period all through the longer time horizons. Specifically, terms of trade accounts for barely 0.24% in the 1st period but its contribution increases noticeably all through the longer horizons as it accounts for about 1.49%, 7.95% and 9.35% in the 3rd, 10th and 16th periods respectively. Whereas foreign aid is the most dominant in the forecast error variance of inflation rate in the 1st period, its influence gradually decreases as from the 2nd period until it gets to its trough of barely 0.61% in the 5th period. However, it begins to rise in the subsequent period all through the longer horizons as it accounts for about 2.65% and 3.08% in the 10th and the 16th periods respectively.

Also, exchange rate accounts for just 0.49% of the forecast error variance of inflation rate in the 1st period but its contribution increases temporarily between the 2nd and the 4th periods. Exchange rate accounts for less than 1% between the 5th and the 9th periods and its contribution increases gradually in the subsequent periods as it accounts for 1.28%, 2.24% and 2.91% in the 10th, 13th and 16th periods respectively. Even though the results in panel B imply that oil price and terms of trade account for significant share of inflation rate forecast error variance in all the periods, foreign aid and exchange rate are important in influencing the inflation rate in Nigeria. Thus, instability in macroeconomic performance in Nigeria may not be solely attributable to oil price shocks.

5. Conclusion
The study examines the effect of oil price on economic growth and inflation in Nigeria, using the SVAR approach. The study finds that oil price shock has significant positive effect on both economic growth and inflation in Nigeria, and oil price shock dominates the forecast error variances of GDP and inflation rate in almost all the time horizons (revealing the possibilities of imported inflation in Nigeria). While terms of trade has negative effect on economic growth, it has positive effect on inflation rate. Also, foreign aid is observed to have mixed effects on economic growth as it has negative effect in the short term while it has positive effect in both the medium and the long terms. The study further points out the dominance of the contributions of both oil price and terms of trade but as well recognizes the importance of foreign aid and exchange rate in influencing the inflation rate in the country.

As a result of the dominance of the oil price in the forecast error variances of GDP and inflation rate, this study recommends diversification of the economy and setting up quality control measures on domestically produced commodities. These will enhance the country to get over the incessant problems associated with the mono-economy. Also, the negative effect of terms of trade on GDP necessitates the call for drastic measures to be put in place to revamp the productive capacity of the country. This will help to avert unfavourable balance of payment in the country.

Table 1: Results of VAR Lag Length Selection Criteria

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<tr>
<th>Lag</th>
<th>LogL</th>
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<th>FPE</th>
<th>AIC</th>
<th>SC</th>
<th>HQ</th>
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152
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Panel B variables: LNOIP LNFAID TOT LNEXR INF

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* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Table 2: Results of VAR Lag Exclusion Wald Tests

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<th>LNOIP</th>
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<th>LNEXR</th>
<th>LNGDP</th>
<th>Joint</th>
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Note: Numbers in [ ] are p-values; * indicates statistically significant at 5% level
Table 4: Results of Variance Decomposition with Structural Factorization

Panel A: GDP Model

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Panel B: INF Model

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Probs from chi-square with 25 df.

Table 3: VAR Residual Serial Correlation LM Tests

<table>
<thead>
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<th>Panel A: GDP Model</th>
<th>Lags</th>
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<th>Prob</th>
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<table>
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Figure 1: Inverse Roots of AR Characteristic Polynomial
Figure 2: Response to Structural One S.D. Innovations in GDP to Variables' Shocks

Figure 3: Response to Structural One S.D. Innovations in Inflation Rate to Variables' Shocks
References


ABSTRACT

This study examines how gender equality can engender sustainable human capital development, using conceptual approach, through the review of extant literature. The findings from literature revealed that gender inequality has negatively impacted sustainable human capital development. Furthermore, extant literature shows that gender equality has a significant positive relationship with sustainable development, human capital development and educational development. It can therefore be concluded that gender equality is an important determinant in sustainable human capital development in Nigeria. It is recommended that the government as well as the private sector should create and implement policies that will eliminate discrimination in public and private organizations. Leaders should eliminate culturally defined differences between men’s and women’s rights and responsibilities, that is, the distribution pattern of rewards and resources.

Keywords: Gender, Gender Equality, Sustainable Human Capital Development, Nigeria

1. Introduction

Gender inequality is a situation where there is uneven distribution of resources between male and female segments of the population in such a manner that one is favored at the expense of the other. Consequently, this results in income disparity within the society which leads to other inequalities in the economy especially in the area of Human Capital Development.

In Nigeria economy, resources are distributed unequally against the female gender due to societal norms, beliefs, customs and stereotypes. For instance gender inequality within the overall society and across all sectors shows the wide disparities between women and men which, in turn contribute to uneven development and feminization of poverty. Gender inequality leads to frustration, apathy, violence, lop-sided development and underdevelopment, therefore considering the unrecognized roles of women towards the growth and development of the nation, the need to operationalise equal opportunities to enhance sustainable human capital development cannot be overemphasized (Eneh, & Nkamnebe, 2011).

Robertson, (2012) posits that indicator of inequality in Nigeria are: High poverty level; out of 70% of people living below poverty line 65% are women and 5% men, participation in workforce: 76% of Federal civil service workers are men while women accounts for only 24%, income and purchasing power: estimated to be US$1,495 for men as compared to US$ 614 for women, participation in decision making process: at the National Assembly, based on the current Nigerian 8th National Assembly, women occupy 7 out of 109 Senate seats and only 22 out of 360 seats in the House of Representatives which account for 6% of women. Globally, it has been recognized that inclusivity in political participation is a fundamental aspect of modern democracy.

The above are clear facts that women’s financial resources are inadequate and unstable relative to that of men. The consequences of these problems have both ethical and long-term economic implications and in the long run, would translate into low rate of economic development. In line with this, the United Nations came up with a policy to stimulate the right atmosphere for women’s participation in sustainable economic development which can be realized through sustainable human capital development. Considering the fact that women constitute about half of the world’s population, efforts were therefore put in place globally to address this, to ensure that they are integrated into the modern economic system through various strategies, policies and programmes (Asuru, 2015). Having an enabling environment that supports equitable
development of both genders through quality education, programmes, polices and activities directed to enhance knowledge, sharpen skills, inculcate values and norms, and encourage behaviour necessary to realize full human capacities since sustainable human capital development cannot be achieved without gender equality (Chowdhury, Dewan, Quaddus, Naude & Siddique, 2018). Gender Equity is the process of allocating resources, programmes, and decision fairly to both males and females without any form of discrimination and addressing the imbalances in the benefits available to males and females (Pathania, 2017). Sustainable development is viewed as development that meets the basic needs of the present generation in a way that did not affect the ability of the future generation to meet their needs. Gender equity serves as an essential building block for this kind of development. Despite the changes in the approach used in addressing social, economic and environmental issues in Nigeria, the achievement of developmental goals still remain a mirage (Gbadebo, Keshiro, Sule, Adeyemi, & Yemi, 2018).

This study conceptually examines gender equality and sustainable human capital development in Nigeria to elucidate on link between gender equality and sustainable human capital development; and how gender inequality affects sustainable human capital development in Nigeria.

2. Literature Review
According to Organization for Economic Corporation and Development (OECD, 2008), sustainable development can only be achieved through long-term investments in economic, human and environmental capital. At present, the female half of the world’s human capital is undervalued and underutilized the world over. As a group, women and their potential contributions to economic advances, social progress and environmental protection have been hindered. Better use of the world’s female population could increase economic growth, reduce poverty, enhance societal well-being, and help ensure sustainable development in all countries. Closing the gender gap depends on enlightened government policies which take gender dimensions into account.

According to World Bank (1995), gender is defined as any aspect of the relationship between men and women that involves role assignments with direct or indirect, positive or negative impact on development goals. Consequently, gender relation refers to culturally defined differences between men's and women's rights and responsibilities, i.e. division of labour and the distribution pattern of rewards and resources. In fact, these roles are defined by culture through the assignment of responsibilities by sex and age, thus perpetuating differences in men's and women's right in the distribution of society's rewards, resources, land, capital tools and time etc. Its spillover effects usually affects the distribution of non-material elements like power, knowledge, participation in decision making, health status, etc. To understand the pattern of distribution, there is the need to know the difference between sex and gender. While sex is biologically unchangeable and universal, gender is cultural, changeable and variable. Gender is culturally determined and enforced. For example, gender division of labour and distribution of resources is rooted in cultural perceptions of differences in men and women in terms of make-up, taste and preferences, thought process, physical characteristics and capabilities (Nwakeze, 2010).

Causes of Gender Inequality
Oladunni (2003) opined that gender in the household defined by culture is the main cause of female poverty and underdevelopment. In her work, women and underdevelopment, in his study, he showed that gender role and unequal distribution of household resources are the main causes of women's poverty. She also explained that institutional and social norms and perceptions generate unequal access to services and resources within the community, and wage discrimination in the labour market. She posited that the persistence of gender roles and relations have negative implication on economic development. It is particularly detrimental to the social and economic empowerment of the female gender. Sex typification in labour force is another issue that promotes gender inequality. While some jobs are specified as feminine others are "branded" as being for male. This specification indicates the actual role and responsibility for the job.

Udosen (2000) posits that housework, catering for the needs of the family and child caring constitute the main work of women. In other words, women's work is synonymous with “house work”. This implies that much of women's jobs are done in the home. Sometimes when they work outside their home, women are largely employed in the informal sector. According to Standing (1992), Indian women are employed mainly in the unorganized sector which is seldom captured in official statistics. Besides, employment in the informal sector offer low levels of remuneration and poor condition of services which in turn deepens inequality. In recent times, there has been a great deal of concern about the discriminatory practices in
the labour market based on gender considerations. Specifically, several practices, beliefs and stereotypes are held against the female gender with regards to their suitability for certain jobs, eventual empowerment and advancement on the job.

**Gender and Empowerment**

The issue of empowerment first surfaced in gender and development debates in the work of Sen and Grown (1987) and Moser (1993). These writings reflected a concern among feminists in the South and North that women would never develop unless they could become sufficiently empowered to challenge patriarchy and global inequality. Moser (1993) focused on self-reliance and internal strength, arguing that empowerment was best defined as the ability to determine choices in life and to influence the direction of change, through the ability to gain control over crucial material and non-material resources. Sen and Grown (1987) emphasized collective action based on the life experiences of women in the South, particularly the very poor. Hence they called for a collective vision, a set of strategies and new methods for mobilizing political will, empowering women and transforming society.

**Gender Equity**

Gender Equity is the process of allocating resources, programs, and decision making fairly to both males and females without any discrimination on the basis of sex and addressing any imbalances in the benefits available to males and females (Pathania, 2017). Gender relations are constantly being renegotiated in the context of changing political, economic, social, and cultural environments at the local, national and international level.

**Human Capital Development**

The term human capital development can be defined as those activities geared towards improving knowledge, sharpening the skills, instilling the values, and encouraging the behaviour necessary to actualize the potentials of staff of the organization (Alo, 2000). According to Sullivan and Steven (2013), Human capital development is about recruiting, supporting and investing in people through education, training, coaching, mentoring, internships, organizational development and human resources management. Human capital development recognizes that the development and growth of people in organizations and business are an important and essential asset to the organizations future success. Healthfield (2011) defined human capital development as a framework for helping employees develop their personal and organizational skills, knowledge and ability. According to her, human capital development includes such opportunities as employee training, employee career development, performance management and development, coaching, monitoring, etc.

**Concept of Sustainable Development**

On September 25, 2015, one hundred and ninety-four (194) member states of the United Nations including Nigeria, adopted the 2030 Agenda for Sustainable Development tagged; "Transforming our World: The 2030 Agenda for Sustainable Development". The campaign, known also as "Project Everyone", is part of the United Nations’ efforts to build a comprehensive development plan aimed at completing the unfinished business of the Millennium Development Goals (MDGs), and is intended to help communicate the agreed sustainable development goals to a wider constituency. The Sustainable Development Agenda has 17 global goals with 169 targets. Topmost on the list of these goals are: the eradication of extreme poverty and hunger, the achievement of Universal Primary Education, the promotion of gender equality and empowerment of women, the reduction of child mortality, the improvement in maternal health, among others. There is no gainsaying the fact that Nigeria like most other African countries has not been able to achieve many of its Millennium Development Goals and targets, not to talk about making any concerted efforts towards the Sustainable Development Goals (SDGs).

According to Gbadebo, Keshiro, Sule, Adeyemi & Yemi (2018), some inhibiting factors to sustainable development in Nigeria include: lack of qualified people to develop and implement alternative technologies due to a poor educational system and brain drain, lack of education about finite resources, corruption, and internal conflicts, unfavourable government policies and priorities which are often short-term and limited only to meeting the basic needs of the present day: provision of shelter, food, portable water, healthcare and education, without any significant long term development plans for sustainability of such policies. These, no doubt, inhibit our march towards sustainable development as envisaged under the UN’s 2030 Agenda for Sustainable Development. According to Pathania, (2017) sustainable development depends on an equitable distribution of resources and it cannot be achieved without gender equality.

**2.3 Theoretical Review**

Gender equality and sustainable development have attracted significant attention from the theoretical point of view and some theories include: Distributive Theory, Social Learning Theory and The Humanistic theory.
**Distributive Theory**
According to David Ricardo as cited by Akpakpan (1999), the causes of poverty, hunger and general misery in the land is as a result of distributive pattern, i.e. the way the wealth of the nation is distributed among the members of the society. In Ricardo's analysis, the pattern of distribution of rewards and resources favoured the land-owning class at the expense of the other (capitalist and workers). Given that the men own most of the land due to societal norms and stereotypes, it therefore implies that the rewards and resources (national wealth) are distributed in their favour, hence causing economic inequality in the society. The spillover effects usually affect the distribution of non-material elements like power, knowledge and health status. To redress this inequality, Amartya Sen as cited by Todaro and Smith (2012) postulated that women need education, health and empowerment.

**Social Learning Theory**
Social learning theory of Miller (2011) stated that personality represents an interaction of an individual with his/her environment. Put differently, one cannot speak of a personality internal to the individual that is independent of the environment. Neither can one focus on behaviour as being an automatic response to an objective set of environmental stimuli. Rather to understand behavior one must take the individual (history of learning and experiences) and the environment into account. Contingencies of social learning: cues, recognitions and consequences that individual behavior can best be understood. Miller (2011) defines personality as relatively stable set of potentials for responding to situation in a particular way. For Miller, personality and behaviour are always changeable. He opines that if you change the way a person thinks, his/her behavior will change.

The more life experience one has in building up certain sets of beliefs, the more effort and intervention required for change to occur. The theory of social learning was used in this because the theory explains the individuals’ personality and how it is influenced by the environment.

**The Humanistic theory**
The Humanistic theory is a psychological perspective which rose to prominence in the mid-20th century in response to the psychoanalytic theory of Sigmund Freud and the behaviourism of Skinner. The theory is sometimes referred to as a "third force," as distinct from the two more traditional approaches of psychoanalytic and behaviourism. This theory emphasizes on an individual's inherent drive towards self-actualization and creativity (Aileen-Milne, 2003). The theory acknowledges that an individual's mind is strongly influenced by ongoing determining forces in both their unconscious and conscious world around them, specifically the society in which they live. The focus of the humanistic perspective is on the self, and this view argues that individuals are free to choose their own behaviour, rather than reacting to environmental stimuli and reinforces. Here, issues dealing with self-esteem, self-fulfillment, and needs are paramount.

**Empirical Review**
Gbadebo, Keshiro, Sule, Adeyemi, and Yemi, (2018) examined gender equality and sustainable development in Nigeria. The study specifically examined the magnitude of the relationship between gender equality and sustainable development and investigated on how the relationship between men and women affect sustainable development in Nigeria. Annual time series data sourced from the World Bank Development Index (WDI) covering the period of 2001 to 2016 were used in the study. As preliminary tests, descriptive and graphical trend analysis, and unit root test were conducted while the correlation analysis, OLS regression analysis and Granger causality test were employed in the actual estimation. The result showed that, gender equality has a significant positive relationship with sustainable development in Nigeria.

Licumba, Dzator and Zhang, (2015) wrote on Gender equality in education and economic growth in selected Southern African countries. The study examined the impact of gender equality in education on economic growth on a panel data of five Southern African countries between 1970 and 2010. These results indicate that the effects of gender equality in education to be positive significant and robust to changes in specification.

Tchouassi (2012) analyze the relationship between gender equality and sustainable development based on the Kuznets curve associated to environmental analysis. The cross sectional analysis, with data from 11 countries in Central Africa in 2010, was used. Results found a positive correlation between gender equality and sustainable development. When the Multidimensional poverty index increases, environmental problems reduce, translating the role of gender in sustainable development in all Central African countries.

In another study, Chowdhury, Dewan, Quaddus, Naude and Siddique (2018) explore the ways and means of mitigating gender inequality for sustainable development of coastal fishing communities of Cox’s Bazar, Bangladesh to determine the indicators of gender inequality. Data were collected using the semi-structured...
interviews from the coastal women, NGO members and local government representatives of coastal fishing community of Bangladesh. Analytical Hierarchy Process (AHP) integrated Quality Function Deployment (QFD) is used to analyze the data. The study finds that ensuring education, access to financing and skill development are the most important factors in mitigating gender inequality for sustainable development.

In a similar vein, Fodor and Horn (2015) explores the macro level determinants of the gender poverty gap in the ten post-socialist European Union member states using the 2008 cross-sectional wave of the survey Statistics on Income and Living Conditions (EU-SILC) and multi-level modeling techniques. In dialogue with the literature on the impact of economic development on gender inequality in Asia and Latin America, the study find that fast-paced, foreign capital led economic growth is associated with a larger gender poverty gap in Central and Eastern Europe, while generous welfare policies, specifically higher levels of spending on pensions and family policies are correlated with women’s lower relative destitution. The findings suggest that structural adjustment and global market integration may exacerbate women’s vulnerability even when they are well equipped with human capital and other resources to compete with men in the labor market.

**Proposition**

The findings from literature revealed that gender inequality has negatively impacted sustainable human capital development. Furthermore, extant literature shows that gender equality has a significant positive relationship with sustainable development, human capital development and educational development. From the foregoing a model model was propose by the researchers.

\[
SHCD = f(GE)
\]

\[
SHCD = \beta_0 + \beta_1(GE) + \mu_i
\]

Where;

- \(SHCD\) = Sustainable Human Capital Development
- \(GE\) = Gender Equality
- \(\beta_0\) is the constant term
- \(\beta_1\) is the coefficient estimators
- \(\beta_1 > 0\)
- Where \(\mu\) is error term

**Conclusion and Recommendation**

It can therefore be concluded that gender equality is an important determinant in sustainable human capital development in Nigeria. It is recommended that the government as well as the private sector should create and implement policies that will eliminate discrimination in public and private organizations. Leaders should eliminate culturally defined differences between men’s and women’s rights and responsibilities, that is, the distribution pattern of rewards and resources.

**References**


ABSTRACT

This study was conducted to interrogate the relationship between the entrepreneurial intentions of post-graduate education students and their in-class social capital pool, using sociometric analysis. The research attempted to unveil the social ethos unique to entrepreneurs and to estimate entrepreneurs' pool of social capital, among other goals. The study adopted a survey design of the descriptive type, with the 158 CEF 704 post-graduate students in three departments of the faculty of education of the University of Ibadan as the population. Data were collected using a seven-item questionnaire via Google docs tagged Social Capital and Entrepreneurial Intention Questionnaire (SCEIQ). Responses were downloaded and analysed descriptively using mean and percentages. We tested the hypotheses with Pearson Product Moment Correlation and Analysis of Variance (ANOVA). We also used simple sociograms to illustrate respondents' social capital pool, based on in-class friendship. The results of this study showed that students with more social capital, that is the social stars, intends, or perhaps are more likely to become entrepreneurs than their isolate or less popular counterparts. The study also established a link between parental occupation and entrepreneurial intention, with the insight that, for all the identified "stars" or intending entrepreneurs, at least one of their parents is, or was an entrepreneur. The paper recommends that parents should not discourage their wards who are prone to having a lot of friends as they might end up being great entrepreneurs.

Keywords: Sociometry, in-class social capital, entrepreneurial intention, social network, parental occupation.

1. Introduction

Entrepreneurship education (EE) programs have grown globally, given their acclaimed potential to promote business skills and attitudes among the populace over the last two decades. In Nigeria, entrepreneurship education, introduced by the Nigeria University Commission (NUC) in 2006, is primarily a strategic and pedagogical response to the economic problem of unemployment and related challenges of underdevelopment. Nigeria, as with many developed and developing countries, embraced entrepreneurship education as a veritable means to sustainable economic growth. With about one-fifth of its working population unemployed or underemployed, according to National Bureau of Statistics (2017) and a growing army of graduates of higher education institutions with little prospects of securing meaningful employment, entrepreneurship education is a welcome and valued solution for Nigeria in particular. Today, universities and other Nigerian higher education institutions run courses in entrepreneurship and have been mandated to foster entrepreneurial skills in their graduates so as to engender much desired occupational self-reliance. A number of studies have claimed that entrepreneurship can manifest and drive both formal and informal economic activities for wealth creation (The World Bank - Alexandria, Brent and Alicia, 2014). Unfortunately, the impact of the EE programme has not resulted to increased number of start-ups or reduced unemployment, as anticipated.

One reason for the low impact of these entrepreneurial education interventions is that researches in this field have historically focused on understanding the individual personality of the entrepreneur, despite the fact that entrepreneurship is a group or social endeavour (Davidsson, 2016; Hills, 1988; Scott and Twomey, 1988; Hood and Young, 1993). Most studies perceive entrepreneurship as a dynamic process encapsulating vision, change, and creation; requiring the unique individual to apply uncommon energy and passion towards the creation and implementation of new ideas that births imaginative solutions. This individualistic approach is the persona perspective to entrepreneurial research. According to this perspective, the studied exceptional individual boasts of the willingness to take considered risks in terms of time, equity, or career; has the uncommon competence in bringing together and managing an enterprise; possesses the imaginative skill to acquire needed resources, and of course, has the extraordinary capacity to "recognise opportunity where others see chaos, contradiction, and confusion" (Kuratko & Hodgetts, 2004). These physiognomies of
seeking opportunities, risk-taking, and having the singular sense of purpose to push an idea through to reality combine into a special personality trait that defines the entrepreneurial personality. Traditional entrepreneurial research has historically focused on this individualistic or personality paradigm.

In recent times, however, researches in entrepreneurship have gradually drifted, according to Davidsson (2016), away from emphasis on psychological traits of the entrepreneurs towards groups, teams, networks and, social capital. This shift is understandable given that all economic exchanges and business relations, including entrepreneurship, begin from an initial social intercourse between buyers and sellers, sellers and suppliers, community, governments, and so. The society itself can thus be considered as a market in which people exchange all variety of goods and ideas in pursuit of their interests. And, through a sociological prism, companies are perhaps consciously-created, non-kin social groups having economic goals like profit as their fundamental value.

This research consequently adopted a sociometric approach to interrogating the social personality (social capital) against the traditional individual personality dimensions in the extant literature, in an attempt to explore and understand in greater detail the social ethos of postgraduate students as they impact their entrepreneurial decisions and intentions. The study focuses on the social characteristics of entrepreneurs, which may be better understood through analysis of their networks and social capital; a missing insight that makes this study imperative.

**Statement of the Problem**
Apart from the mentioned focus on the individual personality, what is less researched and measured, especially in developing economy contexts like Nigeria, is the social characteristics of entrepreneurs and how pool of social capital may influence both entrepreneurial intention and actual enterprise development among students. The current research thus attempted, using a sociometric approach, to unveil the entrepreneurial personality within Nigeria’s developing economic and social setting.

**Research Objectives**
This study has five objectives:
1. To unveil, empirically, the *social gene or social ethos* of a typical entrepreneur.
2. To establish the level of social capital of aspiring entrepreneurs.
3. To possibly classify intending entrepreneurs sociometrically as *stars* or *isolates*.
4. To determine the causal relationship between parental occupation and entrepreneurial intention of respondents.
5. To construct the sociogram of identified prospective entrepreneurs using their social capital scores.

**Research Questions**
This study attempted to answer the following research questions:
1. What is the social nature of potential entrepreneurs, *isolates* or *stars*?
2. How much social capital does a typical intending entrepreneur have?
3. Does parental occupation influence entrepreneurial intention?

**Hypotheses**
The following hypotheses were proposed:
1. There is no significant difference in the entrepreneurial intention of social *stars* and social *isolates*.
2. There is no significant influence of parental occupation on students’ entrepreneurial intention.

**Significance of the Study**
This study presented an empirically tested knowledge about the level of social capital of potential entrepreneurs among Nigerian students and may be useful in predicting entrepreneurial potential of students. Such knowledge may prove useful in recruitment of employees with entrepreneurial outlooks and for targeted recruitment into entrepreneurship education programs. The study is also significant in its attempt to interrogate entrepreneurial intention through the social network prism against the traditional entrepreneurial personality focus.

**2. Literature Review**
Developed by Jacob L. Moreno, sociometry is a quantitative and graphical technique for measuring social relationships. It depicts patterns, such as how individuals associate with each other when acting as a group toward an objective (Criswell, 1960). Sociometry is a way of measuring the degree of relatedness among people. Measurement of relatedness can be useful not only in the assessment of behavior within groups, but also for interventions to bring about positive change and for determining the extent of change. A sociogram is a pictorial representation of social relations that a person has (Didactic Encyclopedia, 2015). It is a graph that denotes the structure of interpersonal relations in a group.
Sociograms reveal characteristics of the individuals within a social network, such as social *stars* and *isolates*. Stars are individuals that exhibit distinctively high and sustained visibility and social capital (Call, Nyberg, & Thatcher, 2015). They have large social network of friends, peers, colleagues, etc. Isolates exhibit disproportionately low visibility and social capital.

**Theoretical and Empirical Reviews**

This study has theoretical basis in the Social Capital Metaphor. The social capital metaphor suggests that people who do better in life are somehow better connected. This metaphor offers a basis for this paper's sociometric approach to test if those better connected, that is, those with greater social capital, are more likely to be entrepreneurs.

To establish the relationship of students' social capital components and entrepreneurship intention, Adaryani, Akbari, Adel and Amiri (2014) examined and measured social capital by four components, that is, social participation, social cohesion, social confidence and social communication. They found out that social participation and social cohesion had a direct effect on entrepreneurial intention while social confidence and social communication had an indirect effect on it. There is therefore positive relationship between social capital and entrepreneurial intentions (Shakiba, 2012).

In a related study, Cetindamar et al. (2012) found that social capital of student has a significant influence on the career intentions of students. As the level of social capital network span increase there is a gradual increase in the entrepreneurial intention of students and a corresponding decrease in the ratio of job seeking preferences of students. Their finding agrees with most of the studies done earlier (Tararko, 2013; Leiffel et al. 2009; Linan, 2007), which stressed that social capital can facilitate the positive implementation of entrepreneurial intentions. Entrepreneurial programmes have been found to be successful in building social capital and subsequently entrepreneurship development in USA (Servon, 1998). With the continuous changes being witnessed in the demographic structures and families some latent results challenging the traditional results may be expected in future studies done to find the impact of familial and social variables on entrepreneurial outcomes.

Klyver and Schött (2011) who investigated how social network structure shapes entrepreneurial intentions found that individuals in a social network with a low density are more likely to develop entrepreneurial intentions. Klyver and Schött’s (2011) study also revealed that individuals with relatively large business networks, that is, social capital, are more likely to develop entrepreneurial intentions. They concluded that the density of networks does not seem to provide competence and skills to start a business but might provide other resources valuable for the start-up process.

A study by Jamshidinavid, Chavoshani and Parse (2014) investigated the relationship between social capital and organisational entrepreneurship with Islamic Azad University of Kermanshah, as case study. They found that perceptions of social capital in the form of relational capital, cognitive capital for entrepreneurship leads to a significant positive predictor in team effectiveness. Chia and Liang (2016) also investigated social capital influences on the entrepreneurial intentions of tourism students in a metropolitan area, with the objective of contributing towards talent development in touristic entrepreneurship. They found out that tourism students with higher levels of social capital demonstrated stronger entrepreneurial intentions.

**3. Methodology**

This study adopts the interpretive paradigm. The research approach is qualitative. The research design is a survey of the descriptive type. The 158 post-graduate students (Masters) in three departments of the faculty of education, University of Ibadan, constituted the population. An e-questionnaire on Google Forms tagged Social Capital and Entrepreneurial Intention Questionnaire (SCEIQ) was designed and circulated to the students via the course' WhatsApp electronic platform (https://docs.google.com/forms/d/1_Y5RCDlyCuukKOud_ggyN420rh6thvy_42wk5HRJwYK4/edit). The e-questionnaire was administered to all the 158 students over a period of four weeks, due largely to slow response to e-questionnaire. 72 responses were downloaded with 7 duplicate entries. So, there were effectively 65 respondents, or 41.13% response rate. Data collected were analysed descriptively using frequency counts, mean, percentages and standard deviation. For inferential statistics, the T-test and Pearson’s Product Moment Correlation.

**4. Results**

**Demographic Data Analysis**

From the network diagrams below, responses from the PG students identified seven (7) stars, that is, in this context, students with more than one friendship nomination or network size, herein conceptualised as social capital pool. Of these seven (7) stars, two (2) of them have network size or social capital pool of four (4). Two (2) of the stars have social capital size of three (3), while the remaining three (3) stars have network size or social capital size of two (2) each. Figure 1, a group network diagram, illustrates this.
In figure 3 and 4 below, many of the respondents' fathers (45.8%) were employees of either a public corporation or a private firm, while 38.8% of their mothers are/were employees. 54.2% of the respondents' fathers and 61.1% of their mothers were entrepreneurs.
Figure 5 indicated that overwhelming majority of respondents (69.4%) have between 1 and 5 friends; 6 to 10 close friends are 19.4% of the respondents; 11 to 15 close friends are 6.9% of the respondents, while more than 15 close friends are only 4.2% of the respondents.
5. How many close friends do you have among TEE 704 Class?

72 responses

Option 1 1-5 close friends: 50 (69.4%)
Option 2 6-10 close friends: 14 (19.4%)
Option 3 11-15 close friends: 5 (6.9%)
Option 4 More than 15: 3 (4.2%)

Figure 6 below shows the number of casual friends of respondents. 1 to 10 casual friends constitute 26.8% of the respondents; 16.9% have 11 to 20 casual friends while 32.4% have more than 20 casual friends.

Analysis of Research Questions

Research Question 1: Are intending entrepreneurs isolates or stars?

Table 1.0 - Entrepreneurial Intention and Social Capital

<table>
<thead>
<tr>
<th>Network Size</th>
<th>Count</th>
<th>Entrepreneur</th>
<th>Employee</th>
<th>% Entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
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<td></td>
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</tr>
<tr>
<td>1 (Isolates)</td>
<td>45</td>
<td>20</td>
<td>25</td>
<td>44.44</td>
</tr>
<tr>
<td>2 (Stars)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>50.00</td>
</tr>
<tr>
<td>3 (Stars)</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>66.67</td>
</tr>
<tr>
<td>4 (Stars)</td>
<td>2</td>
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<tr>
<td>Total</td>
<td>65</td>
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</tbody>
</table>

In table 1.0 above, there are 45 isolates among the 65 respondents. Only 44.44% of these isolate students intend to become entrepreneurs. Two (2) student stars of the 65 lots have network size of two (2) and half
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of them (50%) intends to be entrepreneur. Three student stars have network size of three (3), while two (2) student stars have network size of four (4). It follows here that the greater the network size or social capital, the greater the propensity of becoming an entrepreneur. From the table above, entrepreneurs are stars.

**Research Question 2:** How much social capital does a typical intending entrepreneur have?

<table>
<thead>
<tr>
<th>Network Size</th>
<th>Count</th>
<th>Entrepreneur</th>
<th>Employee</th>
<th>% Entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Isolates)</td>
<td>45</td>
<td>20</td>
<td>25</td>
<td>44.44</td>
</tr>
<tr>
<td>2 (Stars)</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>50.00</td>
</tr>
<tr>
<td>3 (Stars)</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>66.67</td>
</tr>
<tr>
<td>4 (Stars)</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>100.00</td>
</tr>
<tr>
<td>Total</td>
<td>65</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

In table 2.0 above, there are 45 isolates among the 65 respondents, post graduate students while seven (7) stars were identified. Two of the stars have network size of two (2); three of the stars have network size three (3) and two (2) of the stars with highest network size four (4). From the results, it can be deduced that a potential entrepreneur has at least two network size, and the greater the network size, the greater the intention to become entrepreneurs.

**Research Question 3:** Does parental occupation influence entrepreneurial intention?

<table>
<thead>
<tr>
<th>Stars</th>
<th>Network Size</th>
<th>EntrepreneurParents (father or mother)</th>
<th>Employee Parents</th>
<th>% Entrepreneur Parents</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 (Stars)</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>50.00</td>
</tr>
<tr>
<td>3 (Stars)</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>100.00</td>
</tr>
<tr>
<td>4 (Stars)</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Table 3.0 showed that six (6) of either the father or mother or both parents of the seven (7) identified stars are entrepreneurs. This implied that there is a link between parental occupation and entrepreneurial intention.

**Test of Hypotheses**

**Hypothesis 1:** There is no significant difference in the entrepreneurial intention of social stars and social isolates.

<table>
<thead>
<tr>
<th>Stars</th>
<th>Test Value = 0</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
</tr>
<tr>
<td>EI</td>
<td>7.416</td>
</tr>
<tr>
<td>Stars</td>
<td>2.789</td>
</tr>
<tr>
<td>Isolates</td>
<td>19.282</td>
</tr>
</tbody>
</table>

Table 4.0 showed that there is significant difference in the entrepreneurial intention of social stars and isolates among the PG students. Stars were found to have more entrepreneurial intention than isolates.
Hypothesis 2: There is no significant influence of parental occupation on students’ entrepreneurial intention.

Table 5.0 - Correlations Between Parental Occupation and Entrepreneurial Intention

<table>
<thead>
<tr>
<th>Variable</th>
<th>Parental Occupation Pearson Correlation</th>
<th>Parental Occupation Sig. (2-tailed)</th>
<th>Entrepreneurial Intention Pearson Correlation</th>
<th>Entrepreneurial Intention Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental Occupation</td>
<td>1</td>
<td>.139</td>
<td>1</td>
<td>.268</td>
<td>65</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>65</td>
</tr>
<tr>
<td>Entrepreneurial Intention</td>
<td>.139</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.268</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>65</td>
<td>65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

According to table 5.0, parental occupation has weak correlation (0.139) or influence on entrepreneurial intention.

Discussion of Results

Sociometric Status of Intending Entrepreneurs

The results from this study showed that the greater the network size or social capital, the greater the propensity of becoming an entrepreneur. Entrepreneurs are therefore stars. This position corroborates Burt’s (2000) assertion that entrepreneurs are people skilled in building the interpersonal bridges that span structural holes. Entrepreneurial networks are networks rich in the entrepreneurial opportunities of structural holes. Individuals in a network that have the same volume of connections can be expected to be well informed about other clusters’ activities and therefore earn opportunities for entrepreneurship (Biggart, 2000). This result is also similar to that obtained by Lin who worked with several colleagues to present evidence of the importance of ties to distant contacts for obtaining more desirable jobs (e.g. Lin, Ensel & Vaughn, 1981; Lin & Dumin, 1986; Lin, 2001, Forthcoming). Similar empirical results appear in Campbell, Marsden & Hurlbert (1986), Marsden & Hurlbert (1988), Flap & De Graaf (1989), Boxman et al. (1991), Lin & Bian (1991), Wegener (1991), Bian (1994, Chap. 5), and in more recent empirical studies (Leenders & Gabbay, 1999; Lin, Cook & Burt, 2001).

Social Capital pool of the Prospective Entrepreneur

In table 2.0 above, there are 45 isolates among the 65 respondents, post graduate students while seven (7) stars were identified. Two of the stars have network size of two (2); three of the stars have network size three (3) and two (2) of the stars with highest network size four (4). From the results, it can be deduced that a typical entrepreneur has at least two (2) network size, and the greater the network size, the greater the intention to become entrepreneurs. Related results are reported by Krackhardt & Stern (1988) on higher performance in student groups with cross-group friendships, and in numerous studies of inter-organization networks (also see Leana & Van Buren, 1999, on corporate social capital): Fernandez & Gould (1994) on organizations in broker positions within the national health policy arena being perceived as more influential.

Parental Occupation and Entrepreneurial Intention

Table 3.0 showed that six (6) of the seven (7) identified stars have at least one entrepreneur parent, establishing a link between parental occupation and entrepreneurial intention. Similar result was found by Pablo – Lerchundi, Morales-Alonso, and Karaosman (2018), that the occupation of the father shows a significant effect on entrepreneurial intention in Germany. The researchers however found, in Italy, no effect of parental occupation, regardless if father or mother, is found for entrepreneurial intention. In Italy, children of entrepreneurs show the highest mean in EI, but the lowest mean is found for students who declared that their father had “other” occupation or was unemployed. According to Pablo – Lerchundi, Morales-Alonso, and Karaosman (2018), if it is the maternal occupation which is taken into account, the highest mean is found for students whose mothers are entrepreneurs, but children of unemployed mothers or whose mother is an employee show similar means for EI close to the middle of the scale. The lowest mean is found for Italian children of civil servant mothers.

Summary and Conclusion

This study interrogated the entrepreneurial personality using sociometric tools. It was an attempt to explore and understand in greater detail the social ethos of entrepreneurs, away from the traditional *personae* focus of most of the previous studies. This paper involved groups and individuals (intending and non-intending entrepreneurs), the structure and nature of which are better understood though analysis of their networks and social capital. This sociometric approach is germane because, at the foundation of all economic exchanges and business relations is an initial social intercourse; relationships that make entrepreneurship a
The study offered insights on the value of the entrepreneurial social capital pool; a knowledge that may prove useful in recruitment of employees with entrepreneurial outlooks and for targeted recruitment into entrepreneurship education programs. The results of this study showed that students with more social capital pool, that is social stars, intends to become entrepreneurs more than their isolate counterparts. The study also established a link between parental occupation and entrepreneurial intention.

Recommendations
Based on the results of this study, the following propositions are recommended for all stakeholders – parents, managers of entrepreneurship education programs, business managers/owners, government, ministry of education and, of course, teachers of entrepreneurship:
1. Parents should not discourage their wards who are prone to having a lot of friends. They might end up being great entrepreneurs.
2. Managers of entrepreneurial education programs need to shift focus from the individualism while recruiting intakes into the programs. Entrepreneurship is a group venture and, as such, deserves social assessment interpretations.
3. Business managers that seek candidates with entrepreneurial competences should go beyond the individual person and appraise the social capital pool of such potential staffs.
4. Ministry of education, teachers and researchers should now focus on the social ethos of the entrepreneur to make a success of entrepreneurship education programs.

REFERENCES